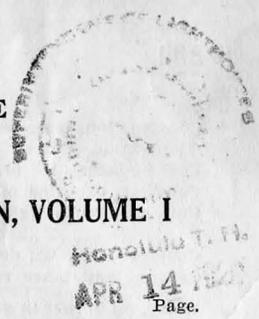


DEPARTMENT OF COMMERCE

BUREAU OF LIGHTHOUSES

INDEX TO LIGHTHOUSE SERVICE BULLETIN, VOLUME I (1912-1917).



	Page.		Page.
Absecon Light Station, visitors	90, 234	Buffalo Light Vessel No. 82, buoy found	139
Acetylene fog gun	50, 62	lost	93
Acetylene lights, Light Vessel No. 78	162	recovery	183
Acting Commissioner	30, 105	wreck located	117
Aerial trolley for keepers	96	Buoy lenses, pressed glass	244
AGA buoys, instructions for handling	54	new 2d-class nun	201
Aids, relighting	249	AGA, handling	54
Alaska, increase of aids	243, 296	Buoys, crossing ocean	10
lighthouse depot	25	gas, on station in winter	66
lighthouse work	157	lighted	21
during 1915	191	marking tested	12
American-made lenses	67	mooring in deep water	265
Annual report, 1911	1	on station in winter	197
1912	45	Pintsch, test	8, 12
1913	97	protecting from birds	63
1914	131, 141	relieving	158
1915	189	spruce spar	289
1916	241	Bureau of Lighthouses, change in address	91
1917	294	Bush Bluff Light Vessel, electric lights	66
Appointments, emergency	262	Candlepower of small mantle lights	261
Appropriations, 1912	33	Cape Charles Light Vessel, off station	145
1913	91	Cape Flattery, difficulty in landing	41
1916	221	Cape Lookout Light Vessel, drowning	78
1917	273	in storm	92
Alaska, tender Cedar	149	off station	53, 154, 244
Aransas Pass Light Station	287	Cape St. Elias, first lighted	233
compared to aids	39	lighthouse and fog signal	193
Aransas Pass Light Station, deficiency appropriation	287	radio station	217
Armeria, sale of wreck	113	visibility	244
Ashland, Wis., electric light and fog signal	192	Carbon in preheaters	287
Assistance, by tender Cypress	266	Carelessness, your worst enemy	290
to Navy	266	Characteristics of lights from rapidly moving vessels	171
Attending to light after injury	50	Charleston lighthouse depot	253
Aunuu Island Light, Samoa	99	Charts, correction by preliminary prints	193
Barnegat Shoal buoy, relighting	249	Christmas greetings	241, 294
Beacon, construction	106	Civilian inspectors	29
lights, Calif.	126	Clock, 4th-order	118
Bear, survivors of wreck	221	Coal consumed, 1916	238
Bell buoy picked up at sea	149	Cobequid wreck, Nova Scotia	101
Bell float	238	Colds	290
Bilges, oiling metal work	226	Collision, Fire Island Light Vessel	217
Bird life, protection	210	Colt generator instructions	66
Bird reservations, seventeenth district	159	Columbia River aids	47
Birds roosting on buoys	5	Columbine, rescue by transfer	205, 209
Boston Light Station, presentation of flag	274	Concrete beacon, Egypt	68
Two-hundredth anniversary	233	Concrete buoys, Jamaica	68
Bottles for poisons	117	Conference, lighthouse inspectors	105,
Breaker Point, Samoa	110		137, 154, 253
Breakwater Light, 2 tank	169		
Bridge lights, failure to maintain	298		
Buffalo Light Station, vibrations by fog-signal machinery	198		

	Page.		Page.
Construction, important works under	33	False flashes, eliminating	184
Cooperation, Bureau of Navigation	113	Fender piles, renewing	174
Cost of structures per cubic foot	112	Fern, tender, transfer	178, 259
Courtesy, expected of all	191	trip, Ketchikan to Seattle	249, 254
Cultivation of lighthouse reservations	265	Finding bottle paper	47
Cushing, L. F. W., death of	222	Fire, damage, Light Vessel No. 74	3
Cypress, assistance rendered	225, 266	Light Vessel No. 99	274
Daisy, oil burner in galley range	257	Tompkinsville depot	215
Damage, by ice	257	Tortugas Harbor	8
Death, Cushing, L. F. W.	222	Fire Island Light Vessel, collision	217
Forsman, Charles	262	radio call letters	234
Helbig, William C., jr.	259	Fishing limits, marking	201
Howes, Samuel J.	277	Flag, Boston Light Station, presentation	274
Johnson, A. B.	149	military service	293
Ruland, E. C.	145	Flags, efficiency	47, 99, 147, 155, 195, 250
Department of Commerce, creation	58	official	105
Depot, Alaska	25	Flies, transmission of disease	222
Charleston, S. C.	253	Floating beacons, fifth district	234
Details, officers, temporary	265	Flying poisons, formula for	254
Device to awaken keepers	14, 70, 76, 106, 171	Fog bell, boat (Canadian)	79
Dewey, Admiral George	253	operated from shore	9
Diamond Shoal, Light Vessel, Bossert collision	7	striker, electric	113
crew of wrecked vessel on	162	Fog gun, wireless	133
off station	53, 90, 201	Fog hours	31, 194, 244, 258, 298
repairs	82	Fog signal, Carquinez Strait	167
tender on station	11	fuel-oil storage	233
watch buoy record	146	gasoline driven	38
Disbursement of funds	21	gauges, recording	2
Disbursements in districts	46	Light Vessel No. 1	134
Disinfectant, liquid	202	Los Angeles Harbor	174
Disloyalty	298	Point Reyes	193
Display colors to warships	129	preheaters	67
Distances by radio and sound signals	177	San Luis Obispo	173
District limits, change in	14	sound deflector	201
District officers, second, moved	201	Stratford Shoal	170
fifteenth, address	60	Food conservation	286, 298
Dominican Republic, lights	199, 217	Formula for fly poison	254
Double mouth horns	87	Forsman, Charles, death	262
Drawings, structural detail	10	French engineers at general depot	96
Earthquake, St. Johns River	210	Frying Pan Shoals Light Vessel, off station	70
Efficiency flags	47, 99, 147, 155, 195, 250	Galley range, oil burner	257
Electric occulting light	38	Gas buoy, New Ground, roving	186
Electric substituting device	192	Gas-pipe connections	66
Electric remote control stations, Angel Island, Calif.	197	Gas tank manifold, automatic	167
Emergency appointments	262	Graphic methods, location by	198
England's lighthouses	218	Guantanamo aids	17
English Lighthouse Service operations	87, 101, 106	Gunfire, protection of dwellings	230
English lightship blown up	3	Harbor entrances, colors for lights and structures	262
Estimates for special works	3, 46, 94, 190, 243	Helbig, William C., sr., death	259
Executive orders	290	Howes, Samuel J., death	277
Exhibit, San Diego and Panama gold medal award	234	Huckleberry Island, Wash., Executive order	290
Southern Commercial Congress	289	Hurricanes, Gulf coast	181, 185, 225, 237, 244, 287
Washington, D. C.	207, 253	Porto Rico	233, 237
Expanded metal reinforcing	210	Texas coast	230
Explosion, acetylene buoy	192	warnings	110, 113
blow torch	113	Ice, damage by	257
Pintsch buoy	3	Iceland lighthouses	278, 283
Wilson buoy	99	Incandescent oil-vapor lamp	257
		Instructions to employees, 1915	177
		Inventory of stock	14

	Page.		Page.
Investigation of Lighthouse Service, report of committee	121, 125	Nicaragua lighthouse	91
Ivy, tender, transfer	134	Nova Scotia lighthouse, heroism	51
Johnson, A. B., death	149	Observation of aids	116
Jupiter Inlet ball-bearing chariot	170	Occulting apparatus	118
Kerosene, saving in purchase	25	Occulting blinds, range lights	238
Key West range lights	109	Occulting lights	25
Kukui, tender, transfer	149, 175	Occulting post lantern	281
Lands, reservation	259	Officers on tenders, rearrangement	61
Lanes, steamer traffic	158	Officers on tenders and light vessels, temporary details	265
Lantern interiors, painting	70	Oil burner in galley range	257
Leave of absence, light vessels and stations	277	Oil concrete	122
tenders' crews	49	Oil engine, salt water cooling	244
Legislation, 1912	13, 30	torch	78, 126
1913	57	improper handling	249
1914	126	Oil-vapor light, accident	215
1915	153	Organization, January, 1912	4
1916	229	December, 1912	48
Liberty loan, bonds	269, 285	August, 1913	80
subscriptions	277	January, 1914	100
Libraries, overhauling	193	July, 1914	124
Licenses, lighthouse vessels	215	February, 1915	152
Lifeboat men, examination	195	August, 1915	176
Light lists, correcting	96	January, 1916	200
Light Vessel, No. 74, fire	3	August, 1916	228
No. 99, fire	274	January, 1917	252
Nos. 101 and 102, description	202	August, 1917	280
stations, marking	74	Pacific lights inspected	37
unattended English	71	Padlocks, standard	14
Lighthouse reservations, cultivation	265	Palmetto, tender, description	187
Lighting, improvements	154	Panama Canal, tonnage certificates	117
Lightning damage	83, 134, 226	Panama-Pacific Exposition	137, 142, 165
Lights and fog signals of the world	165	Parcel post	56
Lights and structures, harbor entrances, colors	262	Philippines lighthouse service	238, 245
Lightship, motor-propelled (German)	63	Pintsch buoys, instructions for handling	53
Line-throwing guns, Alaska	167	Pipe beacon, Eighteenth district	170
Mantle holder, new type	106	Platte Fougere light (English)	49
Mantle lamp, 3-55 mm	78	Point Abino Light Station (Canadian)	142
Mantle lights, small, candlepower	261	Point Judith Harbor of Refuge lights	63
Manzanita, tender, drowning from	210	Pollock Rip Blue Light Vessel, off station	209
reimbursement	30	Portland Light Vessel, off station	217, 249
Mercury float, new	217	Post card, reporting aids	173
Meteorological observations	274	Poster notice to mariners	42
Mexican lighthouse, shortage of food	203	Potatoes grown in sand	281
Military service	295	Power boats for light stations	198
flag	293	Preheaters, carbon in	287
Mine-laying davit bracket	218	President orders transfer of light-house vessels	261
Mirrors, double, for lenses	26	Property, stolen	195
Mooring buoy for light vessels	17	Punctuality, importance	16
Myrtle, tender, transfer	258	Radio call letters, Fire Island Light Vessel	234
Nantucket Shoals Light Vessel, buoy recovered	237, 245	Radio direction finder, Cape Cod	207
off station	7, 146, 249	Radio equipment, tenders	159
Navassa Island Light Station, W. I.	170, 289	Radio fog signals (France)	5, 32
radio	226	Radio station, Cape St. Elias, discontinued	245
reserved for lighthouse	202	Naval Canal Zone	171
Navy, assistance to	266	Radio time signals and notices to mariners	66
Netherlands Indies Lighthouse Service	89		
ice	89		
Neutrality, President's letter	129		

	Page.		Page.
Rattlesnake on post light.....	71	Storm damage—Continued.	
Red paint, new brand.....	171	Racine Reef.....	155
Redding Rock, Calif., working party.....	93	Trinidad Head.....	103
Reforestation, lighthouse reservations.....	166	Storms, Cape Lookout Shoal Light Vessel.....	107
Remarks of Secretary.....	125, 153	Diamond Shoal Light Vessel.....	107
Removal of wrecks by revenue cutters.....	74	San Pedro Light Station.....	107
Rescue, by Sumac.....	138	Straits of Magellan.....	109
by Whitefish Point keeper.....	138	Study of aids.....	117
Reservation of land.....	259	Submarine bells.....	78
Retirement bill, passed Senate.....	213	affected by breakwater.....	93
Riprap, Racine Reef.....	218	audibility.....	18
St. Marys River, repair.....	38	buoy.....	18
Ruland, E. C., death.....	145	Submarine sentry.....	101
San Juan depot.....	6, 9	Submarine signaling oscillator.....	137
Sand Island, Hawaii, Executive order.....	290	Submarine sounds, detecting (German).....	67
Sandy Point Dike Light.....	96	Suggestions by employees.....	2
Sanitary inspection, seventh district.....	166	Sumac, tender, rescue by.....	138
Santa Rosa, Calif., rescue.....	43	Temporary details.....	265
School facilities.....	178	Tenders for military use.....	113
Scituate lighthouse, sale.....	271	Theft, penalty.....	271
Scrap metals expert.....	41	Tillamook Rock, storm.....	51
Sea water on concrete piles.....	133	Tool chest for light stations.....	173
Seeding sandy soils.....	70	Tools and supplies, storage.....	209
Semaphores, Livingstone channel.....	213	Torch, oil-engine, improper handling.....	249
Sheboygan Light Station, improvements.....	197	Transfer of Lighthouse Service in time of emergency.....	230
Shore protection.....	130	Transfer, tender, Columbine.....	174
Sick leave, crews of vessels.....	61	Fern.....	178, 259
Signs, metal warning.....	20	Ivy.....	134
Sirenos, Alcatraz, Calif.....	75, 133	Kukui.....	149, 177
Sixth district depot.....	109	Myrtle.....	134, 258
Sling wheels.....	277	vessels to War and Navy Departments.....	261
Smoked glasses for attending lights.....	66	Trinity House.....	5
Soft coal.....	14	maxim.....	126
Southern Commercial Congress, exhibit.....	289	Umattilla Reef Light Vessel off station.....	101
Spanish lighthouse, lack of food.....	15	Vertical mushroom trumpet.....	87
Spar buoys, from Lakes.....	130	Vessels, new, Cedar, Fern, Laurel.....	169
spruce.....	289	Virgin Islands, lighthouse service.....	277
Spruce spar buoys.....	289	Visibility of light, Nantucket Light Vessel.....	214
Stealing, penalty.....	271	unusual.....	154
Steps Point Range, Samoa.....	113	Visitors at light stations.....	38
Storm damage.....	289	Voucher preparation.....	117
Atlantic coast.....	149, 161, 289	Water samples, Fowey Rocks.....	202
Bolivar Point.....	182	Weather observations on light vessels.....	209
California coast.....	166	Whistling buoy markers for light vessels.....	14
Cape Sarichef.....	155	Whitewash, cost of preparing.....	254
Columbia River Light Vessel.....	103	Willson buoys, explosion.....	99
Galveston, etc.....	177, 181	instructions for handling.....	58
General Depot, Tompkinsville, N. Y.....	79	Windsails for engine room.....	82
Great Lakes.....	93	Winter lights, Great Lakes.....	137, 191
Gulf coast.....	296	Winyah Bay, moving dwelling across.....	222
appropriation.....	206, 233	Wood End Light Station, Mass., lov in 5th-order lens.....	257
Milwaukee pierhead.....	289	Woodbine, tender, trial trip.....	90
North Carolina sounds.....	82		
North Hook, N. J.....	162		
Oregon-Washington.....	98		
Point Reyes, Calif.....	207		
Porto Rico.....	177		

DEPARTMENT OF COMMERCE

BUREAU OF LIGHTHOUSES

INDEX TO LIGHTHOUSE SERVICE BULLETIN, VOLUME II (1918-1923)

	Page		Page
Absecon Lighthouse, visitors	98, 151, 198, 252	Boston Lightship, radio fog signal	315
Acetylene, piping	134	Bowlers Rock Light	169
Acetylene buoys, pipe and fittings	227	Bristol Ferry, damage	11
Acetylene lantern, explosion of	272	Brost, A., death	197
Acetylene tanks, leaking	129	Buffalo, N. Y., storm	209
Addresses on lighthouse work	217	Bugs in lantern, Matagorda	46
Airplane inspection of lights	121, 157	Bulletin items	264
Alaska, increase in aids	52, 103, 155	Buoy bursts during test	70
Alaska lighthouses	277	Buoy, chime, New York Bay	242, 246
Alaska passenger steamer towed by Cedar	255	cone, tall type	121
Amaranth, tender	142	gas and bell, type L	77
American Bureau of Shipping	134	gas, Delaware Bay and River	70
Anchorage grounds, marking	246	new type of	73
Anemone, rendered assistance	11, 85	recovered	85
Annual Report, 1918	49	Buoys, drifting 120, 122, 126, 130, 137, 150, 179, 273, 285	
1919	101	Bush Bluff Lightship	65, 129
1920	153	California earthquake damage	218, 274
1921	205	Calumet Harbor, storm damage	179
1922	253	Camellia, tender, rendered assistance	98
Appreciation	227	Canadian buoy recovered	137
Appropriations, 1918	17, 31, 53	Cape Ann, damage	165
1919	85, 102	Cape St. Elias buoys adrift	122
1920	121	Cape Finisterre, Spain, radio fog signal	233
1923	267	Cape San Blas, moving of	31
Arctic region lights	257, 315	Cape Sarichef and Scotch Cap, radio tele- phones	254, 291
Ashore after 38 years in service	177	Caribbean Sea Lights	81, 190
Assistance, by lighthouse keepers	7, 95, 316	Cast iron, softening in sea water	286
by lighthouse tenders	11	r. copper horns	26
Aster, tender, launching	209	Caution, as to small boats	118
Australia, aids to navigation	257	to employees	197
Automatic fog bell	110	Cedar Beach buoy recovered	85
Automobile, Monomoy Point	283	Cedar, tender, accident to steam launch	145
Azalea, rendered assistance	85	rendered assistance	58, 70
in collision	189	Chandeleur, La., damage	125
Babcock, Joseph C., death	189	Chapel Hill buoy recovered	150
Banding of birds	256	Charlotte, N. Y.	46
Barbers Point keeper assists schooner	266	Charring posts of no value	171
Barker, Theodore, death	234	Cherrystone Bar Light	104
Bartlett Reef, off station	10	Chief of Engineers, United States Army	119
Bell buoy recovered	130	Chime buoy, New York Bay	242
Bell, G. S., death	214	Choptank River Lighthouse, new site	181
Bishop and clerks, saving	285	Christmas greetings	49, 101, 153, 261
Bituminous coal, in cookstoves and heaters	246	Coal pocket, general depot	156
in house-heating furnaces	250	Coatings reduce bond strength of steel	174
Blakeley Rock, Executive order	26	Cold Spring Harbor, N. Y., ice damage	26
Boat winch with counterbalance	109	Commerce, Department of, duties of	303
Bogue Sound, airplane inspection	157	Concrete muffler for combustion engines	89
Bonus, lighthouse employees not entitled	78	Concrete structures	138
Books, needed for men in hospitals	51	Cone buoys, tall type	121

	Page
Conference of superintendents, 1920	151
1921	201
1922	249
Cooperation	166, 171, 182
Cornfield Point Lightship, sunk	73
Corrections, March (1918) Bulletin	18
January (1919) Bulletin	62
Correspondence, elimination of	18
Cortes Bank gas and whistling buoy adrift	120
Cosmos, tender	82
Crocus and Hibiscus tow new vessels	187
Cross Rip, off station	14
Cultivation of land	13
Currents on Pacific coast	280
Currituck Beach, dwelling moved	122
Damage by ice	9, 13, 118
Damp towers, drying by ventilation	162
Dandelion, tender	69
Dearing, William P., death	275
Deaths	46, 62, 65, 173, 181, 189, 197, 202, 207, 214, 218, 234, 237, 241, 252, 264, 275, 285, 311, 316.
Deviation card	3
Dewey Rocks Light	119
Diamond Shoal, attacked by German submarine	69
new vessel	221
Diaphragm, emergency	121
Dry Tortugas, secondary flashes	301
Ducks damage lighthouse	209
Earthquake damage	45, 52, 94, 119, 218, 264, 274
Economy in Government expenditures	189
Efficiency flags	22, 78, 126, 173, 218, 275
Eight-hour day	32
Eighth superintendent's office	130
Electric lamps in large lenses	206
Electric-operated fog signals	257
Eleventh district office moved	292
Elm, tender, description	89
Employees	105
tender assistance	174
Estimates, special works, 1919	51, 102
special works, 1920	156
Execution Rocks, fire	57
Fairport (Ohio) Lighthouse built ashore	197
Falsifying station records	165
Farallon lens, balance wheel	54
Fenwick Island Shoal	218
Ferngarth, wreck, near Navassa Island	214
Fifteenth district office	115
Fire-colored sunset	193
Fire Island, lightning damage	41
Fish Hawk, assistance rendered to	227
Fishing Point	178
Five Fathom Bank, boat adrift	118
Florida hurricane	202
Fog, hours of	52, 98, 155, 210, 252
at Nantucket Shoals	252
Food conservation	4, 22
Food products raised by keeper	53
Food rules	11
Franklin, Daniel, death	264
Fuel economy	137
Fuel value of wood	64
Fuller Rock, explosion	272
Fur seal migration	142

	Page
Gardenia, tender, sold	95
Gas tank recovered	133
Goddard, Ralph H., death	65
Gong buoy	246
Grays Harbor buoy recovered	126
Great Beds	45
Greenbrier, tender	243
Greenbury Point Shoal, ice conditions	25
Hains, Maj. Gen. Peter C., death	207
Harding, President, respect to memory of	293
Hawthorn, tender	109
successful launching	187
Heald Bank, off station	82
Heather, tender, coaling lightship	78
Heath Point (Canada) radio fog signal	314
Hibiscus and Crocus tow new vessels	187
Hibiscus and Zizania, breaking ice	7
High cost of living	98
Hinkley, Lieut. Bartlett L., death	62
Honolulu, Hawaii, proclamation	82
Humboldt Bay fog signal, damage	61
Hurricane damage, 1919, on Gulf Coast	93, 97
1921, Florida	202
1921, Porto Rico	197
Hydroturbine air compressor	103
Ice damage, 1917-18	9
1918	13
1920	118
Ice and flood conditions in Maine	282
Important recent activities	309
Incandescent lights of increased power	300
Incandescent mantle, long life of	267
Inchkeith, Scotland, radio fog signal	263
Index, Volume I, Bulletin	122
Insects cause difficulty	237
dim light	129
International Navigation Congress	282
Isolated electric units, Charlotte	46
Johnson, James L., death	181
Jones Point, Va., anniversary	178
Juniper, tender, rendered assistance	194
Kanahena Point, Hawaii, proclamation	74
Kauai Island, Hawaii, submerged rock	283
Keeper cans fish	22
Keeper purchases Liberty bonds	45
Keeper rescued at sea	278
Keepers on the job	177
Keepers of the light	33
Keepers lost	61
Kenosha Breakwater, storm damage	178
Keweenaw waterway	149
Kilauea Volcano	165
Kukui, tender, rendered assistance	141, 237
Laborers in charge, change in designation	156
Lannan, Michael, death	173
Lanstra, Capt. Jacob N., death	218
Lederer, A. P., death	264
Legislation	17, 29, 31, 53, 65, 85, 102, 121, 133, 267
Lewis Reef, caisson	198
Liberty loan, second	1
third	17
fourth	41, 54
fifth (Victory)	69, 77

	Page
Library of technical books	154
Lighthouse services abroad	289
Lightning, damage by	41, 94, 154, 301
Lightship master warns vessels of danger	274
Lightships, new, to be built	181
Lightship No. 6	14
No. 13	10
No. 20	14
No. 23	14
No. 43	137
No. 44	14
No. 45	18, 129
No. 46	14
No. 51	73
No. 69	14
No. 72	134
No. 73	170
No. 74	2, 155
No. 76	14, 269
No. 79	14
No. 81	82
No. 90	163
No. 93	78, 121
No. 97	65, 129
No. 99	105, 154, 187
No. 103	125, 161, 187
No. 105	110, 207, 221
No. 109	296
Lightships off stations, 1918	14
Little Diamond Island depot, lightning	301
Long-running fog bell striker	173
Los Angeles Harbor, heavy seas	46
storm at	218
submarine disturbance	256
Louisiana land, Executive order	82
Luther, Adam, death	173
McGregor Point, Hawaii, proclamation	74
Majestic, steamer, radio direction finder	299, 306
Mangrove, tender, takes off passengers	255
Mantle, oil-gas buoy	109
Mare Island, transfer to Navy	53
Marigold, tender, cruise of	113
Marine borers destroy sandstone	237
Marine borers in San Francisco Bay	174
Marine show, New York, exhibit	262, 303
Marking wrecks, method of	57
Mary Island, Alaska, accident	165
Matagorda, bugs in lantern	46
Mayflower, tender, refrigerating plant	292
rendered assistance	98
Medical relief, retired employees	70
Memorial tablet, Old Cape Henry	227
Mercury float, large	133
Mess business on tenders	161
Meteors in November	202
Military service	10, 26, 53
Milk, safe, food problem	5
Mine planters, for tenders	263
Mistletoe, tender, rendered assistance	90
sold	230
Moffett, F. A., radio direction finder	291
Molasses and Pacific Reefs (Fla.) lights	270
Molokini Island Light	74, 177
Monomoy Point, automobile used	283
Morgan, Edward H., death	252
Mosquito Inlet, lightning damage	94
Mount Vernon, trip of British delegates	145
Munitions explosion damages stations	45
Murdoch, John, death	316
Murphy, Frank H., death	237
Muskegon Pierhead, rescue work	103
Myrtle, tender, sale of	267
Nantucket Lightship, submarine oscillator	315
Nantucket Shoals, better protection	295
much fog at	252
new lightship with radio fog signal	261
National airs	37
Navassa Island	2
Navigation on lakes, close of	2, 57, 109
Navy yard provisions	129
New Castle Range, electric installation	300
New River Inlet, airplane inspection	157
New Year greetings	1, 209, 261
New York Harbor lights and buoys	261
Night storm warnings, change	50
Nineteenth district, superintendent and chief clerk	233
Ninth district superintendent	145
North Atlantic, drifts of buoys	273
Northern Pacific grounding	133
North Landing River, N. C., airplane inspection	121
Norway, radio fog signals on coast	254, 314
Oak, tender	109
successful launching	187
Office work	25
Oil cans, sale of	37, 146
Old Orchard Shoal	45
Oleander, tender, accident on	151
Organization of Lighthouse Service	48, 72, 108, 132, 164, 184, 239, 288
Pacific coast currents	280
Pacific and Molasses Reefs (Fla.) lights	270
Paint burner, fire caused by	129
Palmetto piles	77
Paris, radio direction finder	313
Patriotism of employees	33, 61
Peaked Hill submarine bell buoy	210, 257
Perilous experience of keeper	264
Peshek, A. W., death	214
Petroleum, how used	222
Pine, tender, description	89
Pingree, Henry L., death	46
Pipe Island Twins, Executive order	78
Pipe towers, with concrete platforms	74
Plate shop, general lighthouse depot	154
Pointsetia, tender	82
Point Arguello, assistance by keepers	316
Point Borinquen	150
Point Conception, leaking roof	33
Point Diablo Light	316
Point Jiguero, earthquake damage	119
Point Wilson, vegetables grown in sand	3
Pollock Rip Channel, new, around Cape Cod	269
Portland Lightship	155
off station	2
Porto Rico earthquake damage, 1918	45, 52
1919	94
1923	264, 274
Porto Rico hurricane damage, 1921	197

	Page		Page
Potatoes, storage of.....	38	Rescue in Boston Harbor.....	251
Positions of lighthouses, changes.....	178	on Lake Michigan.....	251
Potter, Col. Charles L.....	125	Retirement of civil service employees.....	135
Princess Bay.....	45	Ribi�re, director French lighthouses, death.....	202
Publications, revised editions of.....	59, 110	Riprap, method of placing.....	21
sale of.....	50	River district buoys.....	66
Punishments.....	102, 258, 267, 280	Romer Shoal, accident.....	161
Q uita Sueno, proclamation.....	66	Roncador Bank, lightning damage.....	94
R adio beacons, wave allocation.....	279	Roncador Cay, proclamation.....	90
Radio club, amateur.....	249, 255	Rope, guard against freezing.....	70
Radio communication, principles underlying.....	217	Rotary compressors for fog signals.....	73
Radio direction finder, advantages on shipboard.....	221	S abine Bank Light, large saving in expense.....	266
aids vessels in distress.....	314	Sacketts Harbor.....	130
approved by shipmasters.....	245	Sail Rock Light, West Indies, building of.....	245
avoids collisions.....	282, 309	St. Joseph depot, transfer to Navy.....	53
calibration corrections, constancy of.....	221	Sandstone destroyed by marine borers.....	237
Coast Guard installations.....	281	San Francisco Lightship in gale.....	269
conference.....	229	School facilities, first district.....	296
on F. A. Moffett.....	291	Scotch Cap and Cape Sarichef radio telephones.....	254, 291
on foreign vessels.....	225	Seaconnet, steamer, rescue of crew.....	282
locating ship in distress.....	233	Seahorse Reef buoy.....	179
on Majestic.....	299, 306	Seabee, Rear Admiral Uriel, death.....	241
navigation.....	114, 126	Serrana Banks, proclamation.....	66
used in navigating Paris.....	313	Service insignia.....	97, 146
navigational instrument on shipboard.....	265	Ships' ballast used for fill.....	169
in navigation and relief work at sea.....	281, 308	Shrub, tender.....	105, 143
new publication.....	213	Sister Islands, Executive order.....	2
principal types of.....	307	Smoke pipes and furnaces, care of.....	110
progress of on shipboard.....	306	South Manitou, lantern broken.....	3
in rescue work at sea.....	273	Spanish influenza.....	41
at sea.....	295	Spar buoys in Hudson River.....	74
on a ship saves crew.....	193	Spruce, tender, seagoing qualities of.....	266
test of on Sequoia.....	241	Squaw Island, Executive order.....	78
Radio direction finding, methods of.....	229	Squaw Point, fire.....	202
and safety of navigation.....	193	Stannard Rock, damage.....	209, 233
Radio direction signals.....	169	Stealing Government property, penalty.....	26
Radio expedites lighthouse work.....	315	Steam discharges from boilers.....	285
Radio fog signals.....	145	Stock peddlers.....	70
additional in other countries.....	299	Stokey, Maj. W. P., fourteenth district.....	121
on Boston Lightship.....	315	Stored coal, testing for fires in.....	58
Cape Finisterre, Spain.....	233	Storm damage, Atlantic coast.....	117
Heath Point, Canada.....	314	California.....	213
Inchkeith, Scotland.....	263	Florida.....	54
at International Navigation Congress.....	307	Oregon and Washington.....	170
on coast of Norway.....	254, 314	Third and fourth districts.....	21
on Pacific coast.....	193	Stoves, stovepipes, care of.....	163
progress in use of abroad.....	307	Straits of Mary, islands in.....	78
progress in use of in navigation.....	293	Submarine oscillator on Nantucket Lightship.....	315
tests of near New York.....	185	Submerged rock, Hawaiian Islands.....	283
Radio information.....	279	Sunflower, tender.....	151
Radio, light keeper makes use of.....	230	Superintendent, nineteenth district.....	233
for lightships and lighthouses.....	225	ninth district.....	145
saves expense operating tenders.....	241	Swiftsure Lightship, accident.....	78
value of in an emergency.....	313	adrift.....	121
value of in operating tenders.....	271	in a storm.....	266
Radio telephone, emergency.....	314	T ail of Horseshoe Lightship, adrift.....	9
Radio telephones, Scotch Cap and Cape Sarichef.....	254, 291	Tangier Sound.....	105
Radio waves, short, possibilities.....	265	Technical activities of officers.....	227
Raritan Bay, N. J., rapid construction.....	242	Tenders assist breaking ice.....	7, 270
Reclassification law.....	272	Teredo active in Pacific waters.....	165
Red Cross donation.....	31	Thermit welds by employees.....	267
Reforestation reservation.....	256	Thermostat alarm.....	2
Rescue by keeper, Chicago Pierhead.....	89	Thimble Shoal fog signal, audibility of.....	272
		Third lighthouse district, work of.....	310

	Page		Page
Thirty-five Foot Channel Lightship.....	18, 129	Visibility of lights.....	78, 134, 233, 292, 301
Thrift and economy.....	25	Visitors at light stations, second district.....	267
Tidal wave in Hawaiian Islands.....	273	Volcanic haze, Hawaii.....	104
Tow line, passing.....	181	Volcano of Kilauea.....	165
Townsend, Colonel, French honor.....	93	W ade Point, repaired.....	94
Trott, Everett M., death.....	311	War-risk insurance.....	1
Twin River Point, lantern broken.....	3	War-savings plan summarized.....	5
Type B post lantern.....	115	War-savings stamps.....	66
Type L gas and bell buoy.....	77	Water supply at lighthouses.....	21
U matilla Reef Lightship, boat adrift.....	182	Wimble Shoal gas buoy.....	134
Uniform regulations.....	134	Winter Quarter Lightship in storm.....	222
Units retransferred to commerce.....	82	Winter voyage in Alaska.....	214
Unusual visibility, Cape Hatteras Light.....	292	Wreck of Ferngarth near Navassa Island.....	214
Lake Superior.....	301	Wreck submarine S-5, marking of.....	142
Unwatched light, 10 years' service.....	177	Y aquina Head, lightning damage.....	154
V egetables grown in sand, Point Wilson.....	3	Zirpel, Rudolph, death.....	285
Vertical beam of light, trial.....	201	Zizania, renders assistance.....	22
Vessels for third district.....	137	and Hibiscus breaking ice.....	7
Vessels obtained from Navy Department.....	82		
Victory Liberty loan.....	69, 77		

DEPARTMENT OF COMMERCE
BUREAU OF LIGHTHOUSES

INDEX TO LIGHTHOUSE SERVICE BULLETIN, VOLUME III

(1924-1929)

	Page		Page
Abecon Light Station, N. J., visitors.....	266, 312	Blunts Reef Lightship (No. 83) extended	
Acaia, tender, on long voyage.....	203	radio fog signal service.....	4
Adjusted compensation, employees to receive.....	46	Books for lighthouses and lightships.....	288
Aerial exhibits at all-American aircraft show.....	191	Brant Point Light Station, Mass., riprap prevents erosion.....	108
Aerial photographs.....	45	British Isles, radiobeacon on coasts.....	254
Africa, first radiobeacon.....	249	Buoyage, uniformity.....	157
Airways Division, established.....	169	improvements.....	187
aids in St. Francis River disaster.....	241	Buoys, adrift, recovered.....	287
inspection by airplane.....	265, 269	advantages of special type.....	93
personnel conference.....	233	can and nun.....	3
Alaska, fog signal at Point Retreat.....	10	Cape Henry junction buoy recovered.....	297
annual voyage of Cedar.....	113	caution as to ventilating gas buoys.....	179
Cape Spencer Lighthouse.....	105, 117	damage to gas buoy.....	219
difficulty of attending lights in winter.....	75	damage to Montauk Point gas buoy.....	278
district office cooperates in aerial survey.....	308	drifting.....	18
first radiobeacon.....	145	explosion of acetylene-gas buoy.....	312
Lewis Reef Light.....	219	extinguished by flies.....	176
light keeper used amateur radio set to rescue a vessel.....	286	Hawaiian Island, recovered.....	242
new light on Arctic coast.....	63	Improvements in can and nun.....	174
Point Hope Station most northerly.....	265	Matanilla Shoal, example of international cooperation.....	137
Alcohol, explosion.....	308	moored in deep water.....	237
Ambrose Channel Lightship, tube radio fog signal transmitter (No. 87).....	21	new design for small gas buoys.....	211
whistle in use 20 years (No. 87).....	231	Potomac River, equipped with reflectors.....	129
America, S. S., rescue of S. S. Florida.....	275	power boat, for handling in shallow water.....	249
American Marine Standards Committee.....	41, 213	recover buoy in Straits of Florida.....	305
American Merchant Marine Library Association.....	288	recovered 480 miles offshore.....	153
Animals in Lighthouse Service.....	63, 151, 268	recovery of Bethel Shoal buoy.....	190
Annual report, 1923.....	1	special buoys for Lindbergh reception.....	199
1924.....	59	strikes 6,371,350 blows.....	102
1925.....	103	stunk eight years ago, recovered.....	231
1926.....	161	sunk three years, recovered.....	287
1927.....	221	to mark wreck of S-51.....	99
1928.....	271	vagrant buoy returns from Europe.....	93
1929.....	316	valuable equipment recovered.....	200
Año Nuevo Light Station, Calif., earthquake damage.....	175	valve for whistling buoys.....	292
Antioe, S. S., rescue by S. S. President Roosevelt.....	117	Cabo Machichaco, Spain, radiobeacon.....	163
Aranas Pass, Tex., improvements.....	292	California coast, unusual visibility.....	79
Arecibo Light Station, P. R., wind-driven electric plant.....	247	Canada, radio fog signal in Bay of Fundy.....	10
Ashtabula Lighthouse, Ohio, incased in ice.....	267	fog signal at Seal Island.....	22
Aster, tender in gale.....	62	lighthouse service.....	37
Australia, lights.....	150	Southeast Shoal light station.....	211, 287
lighting of Great Barrier Reef.....	71	Cape Ann Lights, Mass., visibility.....	38
Automatic lights, electric lights at Key West.....	87	Cape Charles Lightship, Va. (No. 80), in January gale.....	63
Baltimore Channel.....	61	(No. 72) in a recent storm.....	225
economy in grouping.....	141	Cape Elizabeth Light Station, Me., fog signal engine silencer.....	299
explosion at Peach Island, Mich.....	227	Cape Fear Slue Gas Buoy, N. C., recovered.....	287
extinguished by flies.....	176	Cape Henlopen, Del., abandoned lighthouse collapses.....	135
long acetylene-supply lines.....	317	Cape Henry Light Station, Va., continuous-wave transmitter.....	291
Pooles Island Bar, Md.....	227	synchronized fog signal tests.....	291
Rebecca Shoals, Fla.....	164	Cape Lookout Lightship (No. 107), in October gale.....	312
save money.....	91	Cape Mala, Panama, United States radiobeacon installed.....	307
Bahama Bank, W. I., buoy.....	137	Cape Maria Van Diemen, New Zealand, radiobeacon.....	177
Baltimore Channel, automatic electric lighting apparatus.....	61	Cape Poge, Mass., earthquake shock.....	73
Barbers Point Reef Gas Buoy, recovery.....	242	Cape St. Elias, Alaska.....	23, 281
Barneget Lightship (No. 79) established.....	197	Cape San Blas, Fla., storm.....	292
Bartlett, Charles, obituary.....	57	Cape Silleiro, Spain, radio fog signal.....	107
Bees extinguish light in Houston Channel.....	286	Cape Spartel, Africa, lighthouse.....	202
Betnel Shoal buoy, Fla., recovered.....	190	Cape Spencer Light Station, Alaska, 105, 117, 145, 281.....	281
Beverly, Mass., light on church steeple.....	218	Cape Tres Forcas, Morocco, radiobeacon.....	249
		Carboloy, new machine tool material.....	282

	Page		Page
Casquets Lighthouse, Channel Islands, alteration in radiobeacon	177	Erie, Lake, storm	287
Cedar, tender, annual Alaskan voyage	113	European lighthouse authorities, conference	197
assists Star of Falkland	250	Exhibits, at American Marine Association exposition	107
Cement mortar, use of hydrated lime	64	aerial exhibits at all-American aircraft show	191
Chain, comparison of kinds of anchor chain	217	at Chelsea, Mass.	238
severe tests of cast-steel chain	230	at Sesquicentennial	141
Chateau Thierry, S. S., radiocompass in rescue Chequamegon Bay gas buoy, dog team used in attending	128	Explosion at Makapuu Point, Hawaii	80
Civil-service retirement law amendment	63	Fabal, Miguel, obituary	57
Clearton, S. S., rescue aided by radiocompass	177	Farallon Light, Calif., unusual visibility	79
Columbine, tender, assists S. S. Franconia	181	Fenwick Island Lightship (No. 52), in January gale	63
rescues crew of Coast Guard boat	103	Field, William H., obituary	129
retired after long service	194	Fifth district, improvement to Portsmouth, Va., depot	107
shark caught by crew	108	experiences severe gale	185
trip of	64	fire at depot	239
Columbus, S. S., radio fog signals used	79	marking lighthouse roofs to aid seaplanes	135
Conferences, of superintendents	9, 117, 276	Fire, at general depot	195
airways division personnel	233	at light stations, warning	305
Cairo conference	185	at Portsmouth depot	239
international conference	303	Fire Island Lightship (No. 68) damaged in collision	22
Connecticut River lights, effect of flood	226	First aid at sea	288
Copper Harbor Light Station, Mich., keepers assist steamers Thomas Maytham and City of Bangor	180	Fishing Point Light Station, Va., repeatedly moved	29
Corgan, Henry, keeper, long service	47	moving	84, 250
Craney Island Light Station, Va.	47, 140, 250	Five-Fathom Bank Lightship (No. 108), crew rescues Coast Guard flier	251
Crapo, H. W., obituary	301	Fladen Lightship, Sweden, radiobeacon	163
Creac'h Point Light Station, France, radio fog signal	116	Flies, extinguish lights	95, 176
Cristobal, Canal Zone, radiobeacon	307	Flood-relief work, commendations	198
Cross Rip Lightship (No. 66), adrift	234	Florida, hurricanes	149, 166
Culebrita Island Light Station, P. R., earthquake	213	August storm	290
Cypress, tender, experiences in storm	56	day beacons on reefs	165
		drinking water at reef stations	143
		first radiobeacon stations	230
		Florida, S. S., rescue by S. S. America	275
		Fog, hours	165, 222, 265
		and the radio	183
		conditions in sixth district	183
		information broadcast for shipping	279
		Fog signals (see also Radiobeacons) at Point Retreat, Alaska	10
		fog signal engine silencer	299
		Lambert Point fog bell	14
		new signal at Southwest Pass, La.	317
		remote control	307
		special use of, at Fort Gratiot	187
		synchronized fog signal tests	291
		Foreign lighthouse services. See also Canada.	
		alteration of radiobeacon at Casquets, Channel Islands	177
		authorities visit United States	249
		Cape Sparte Lighthouse, Africa	202
		conference with European authorities	197
		death of D. W. Hood	55
		English engineer visits United States	2
		Haitian lighthouse service	42
		handsome memorial lighthouse at Trieste	198
		lighthouses of Iceland	71
		lighting of Great Barrier Reef, Australia	71
		lights of Australia	150
		Matanilla Shoals buoy	137, 153, 180
		Newfoundland radio fog signal at Cape Bauld	1
		new radio fog signal on French coast	44
		radio fog signals abroad	9
		radio fog signals on the coast of France	63
		radiobeacons established abroad	163
		radio compasses and radio fog signals abroad	4
		radio compasses on French vessels	13
		report of English radio research board	67
		Swedish radiobeacon stations	140
		two new radio fog signal stations on coast of Spain	106
		Fort Gratiot Light Station, Mich., special use of fog signal	187
		Foundations, unusual type for a light	108
		placing subfoundation for Lansing Shoals	217
		tools for preparing holes in rock bottom	118
		Fourteenth district, new superintendent appointed	152
		Fowey Rocks Light Station, Fla., assistance rendered by keepers	277
		model of, on exhibition	118

	Page		Page
France, radio fog signals on the coasts	63	Hurricanes, at San Juan Depot	263
electric lighthouses on coast	263	of July, 1926	149
French radiobeacons	201	of September 1928	259
new radio fog signal on coast	116	on Florida and Gulf coasts, September, 1926	154
Franconia, S. S., ashore at San Juan, P. R.	181	on Florida coast	256, 260
Fresnel, centennial anniversary	218	on Gulf coast	150, 155
Frying Pan Shoal buoy recovered	93	Hyacinth, tender, rescues small boy in river	144
Fuller Rocks, R. I., erection of new beacon	62	raises submerged automobile	268
		transmits messages in wrecking work	180
		Hydrated lime, use in Portland cement mortar	64
Gas buoys, small, in third district	211		
Gibson, Tobias, employee 40 years	305	Ice breakers on dolphins	218
Glass, effect of sea water	5	Ice conditions on Great Lakes	137
Godd, Capt. Thomas B., commended for flood-relief work	198	Ice incased lighthouse on Lake Erie	267
retirement	297	Iceland, lighthouses	71
Great Barrier Reef, Australia, lighting	71	Illuminated beacon at South Haven, Mich.	17
Great Lakes, close of navigation, 1926	171, 225, 273	Instructions to employees	213, 220
extensive use of radiobeacons	161	International hydrographic bureau	43
good reports from radio fog signals	106	International lighthouse conference	303
new notices to mariners	237	Isle Royal, Mich., accident	165
radio fog signals	83	unwatched light	276
radiobeacon tests	283		
radiobeacons	133, 245	Jamieson, Humphrey I., awarded gold life-saving medal	133
storm on Lakes Erie and Ontario	287	Jennings, William H., retirement	130
synchronizing of radiobeacons	303	Johnstons, F. H., retirement	258
unusual ice conditions	137	Jones Point Lighthouse, Va.	134
unusual ice conditions on Lake Michigan	285	Junior engineers, opportunities	171
winter conditions at close of navigation	60	Jupiter Inlet Light Station, Fla., in August hurricane	256
Greenbrier, tender, delivered to Government, used by President	38	new electric lights installed	256
Green Island, Wis., lightkeeper assists airplane	311	radiobeacon	230
Gripsholm, motor ship, experience with radiobeacons	121		
		Ketchikan Lighthouse depot, equipment	93
Haines Point buoy equipped with reflectors	129	Key West Harbor, unattended lights	87
Haitian lighthouse service	42	Kilauea Point Light, first landfall made by Army aviators in Hawaiian flight	201
Hamilton, Alexander, made first report on lighthouses of United States	125	Kilauea volcano	33
Harbor of Refuge Light Station, Del.	233	Kimball, Charles, retirement	80
Harry Yates, S. S., radio compass	238	Kimball, Frank E., retirement	309
Hausmann, Max, reminiscences of 1873	186	Knowles, Capt. Robert H., obituary	84
retirement	182		
Hawaii, aerial photograph of Kaula Rock	45	Lake Carriers Association sends out radiobeacon announcement	133
earthquakes, 1929	312	Lake Huron Lightship (No. 96) radio fog signal installed	83
eruptions of Kilauea volcano	33	Lambert Point Fog Bell, Va.	14
Kaula Rock a difficult site	95	Lansing Shoal, Mich., placing of subfoundation	217
Kilauea Point Light first landfall made by Army aviators	201	light established	265
land transferred for lighthouse purposes	68	lightship struck by steamers	255
lighthouse exhibit at Honolulu	108	Laurel, tender, temporarily replaces Iris	254
new lighthouse pier at Honolulu	299	assists in salvaging plane	298
recover Barbers Point Reef gas buoy	242	returns to regular duties	301
Hawk in lens room	23	Lead filings tighten pipe joints	73, 96
Heat transmission of paint	34	Legislation and appropriations, 1930	286
Heedea Head Light Station, Ore., rescue near	192	Lewis Reef Light Station, Alaska	219
Hegeta Fence Lightship (No. 49) sunk	105	Life-saving medals awarded employees	91, 133
Helander, John A., retirement	88	Lighthouse Service, radio talk by commissioner	99
Henry, Joseph, address	33	Lightning, damage to Ship Island Lighthouse	297
Hibiscus, tender, assists in destruction of seized liquors	93	strikes lightship (No. 103)	298
Hilo, Hawaii, land transferred for lighthouse purposes	68	Lights shown in daylight	291
History of Lighthouse Service, oldest lightship retired from service	105	Lightships, adrift (Nos. 66, 106)	234
historic lighthouse near Alexandria, Va.	134	Ambrose Channel (No. 87) relocated	315
lightship stations maintained between 1820 and 1927	205	comparison of kinds of anchor chains	217
lightkeepers connection with early aviation	272	correction to list of stations	211
reminiscences of 1873	186	during January gale (No. 52)	63
report of 1790	125	new Diesel ship for Northeast End (No. 111)	177
Homerie, S. S., uses radio direction finder in locating sinking vessel	79	No 100 launched	298
Honolulu, lighthouse exhibit	108	No. 103 struck by lightning	298
new harbor light	163		
new lighthouse pier	299	No. 109 in hurricane	311
Hood, D. W., visit	2	No. 116 launched	313
obituary	55	oldest (No. 11) retired from service	105
Hospital Point Light, Mass.	218	radio communications	4
Houston Channel Beacon extinguished by bees	286	riding lights	303
Hudson River, bridge	213	severe test of cast-steel chain (No. 72)	230
lights increased in intensity	138	southern lightships in gale	185
Humboldt Bay Fog Signal Station, Calif., earthquake	220	stations maintained between 1820 and 1927	205
Humphreys, William T., obituary	109	trial trip of new Diesel electric ship (No. 100)	315
Hurricanes, damage on Atlantic coast	42	whistle in use 20 years (No. 87)	231
		Lilac, tender, cruise	52
		Long Point Light, La., destruction	35

	Page		Page
Ludlam, Thomas S., obituary	251	Peaked Hill, Bar, Mass., buoy overhauled	53
Lupine, tender, long voyage	203	damage to buoy	219
Lurcher Shoal, Nova Scotia, radio fog signal	10	recovery of buoy	231
Machine tool material, new	282	submarine bell buoy strikes 6,371,350 blows	102
Makapu Point, Hawaii, explosion	80	Petit Manan Light Station, Me., keepers assist schooner	303
Malone, John H., obituary	277	Petoskey Light Station, Mich., tower destroyed	62
Mantle, long service	47	Philippine Islands, lighthouse service	231
Manvon, Capt. Norman C., receives medal	190	important new lighthouse	253
Marigold, tender, assistance rendered	301	Piles, steel-pile dolphins	4
Marine fittings, new standards	213	pile revetment to arrest erosion	96
Marquette Light Station, Mich., use of radio-telephone	273	Pipe joints, made tight with lead fillings	73, 96
Martin Reef Light Station, Mich., in commission	229	Poe Reef Light Station, Lake Huron	307
Matagorda Light Station, Tex., storm	301	Point Arena, Calif., unusual visibility	79
Matanilla Shoal, West Indies, example of international cooperation	137	Point Borinquen, P. R., earthquake shock	200
buoy recovered	153, 180	Point Hope Lighthouse, Alaska	265
McDermott, William, obituary	231	Point Jiguero, P. R., earthquake shocks	200
McEwan, Frank C., obituary	239	Point Retreat, Alaska, fog signal	10
McNamara, John, retirement	130	Point Reyes, Calif., unusual visibility	79
Mendenhall, Dr. T. C., obituary	22	Point Vicente, Calif., station to go into commission	4
Michigan, Lake, unusual visibility	84	extend service on important lightships	79
unusual ice conditions	235	fog and the radio	43
Miller, J. D., obituary	176	in Bay of Fundy	10
Millwaukee, Wis., important new light station	229	Nantucket signals approved	83
Minor lights, economy in grouping	141	new signal on coast of France	116
Mississippi River, commission uses Magnolia	56	on Great Lakes	83, 106
commendations for flood relief work	198	on Nantucket Lightship found useful	87
electric lights	84	on Pacific coast	83
flood	189, 193	on the coast of France	63
keeper stays on job during flood	198	test of tube transmitters and investigation of night effect	27
lights maintained during flood period	199	tube transmitter on Ambrose Channel Lightship	21
Missourian, S. S., gets good results with radio compass	118	two new stations on coast of Spain	106
Molokai Light Station, Hawaii, earthquake damage	15	used by S. S. Columbus	79
Mona Island Lighthouse, West Indies, inspection and supply trip	77	usefulness	21
Montauk Point gas and whistling buoy	95, 278	Radio operators aboard lighthouse vessels, radio talk	172
Morris, Richard W., obituary	5	Radio sets, donated to light stations and vessels	118, 129
Morse, Frank J., retirement	136	advantages of, at isolated stations	129
Nantucket Lightship, extended radio fog signal service	4	lightkeepers supplied	279
additional radio fog signal service	51	Radio talks, Our Lighthouse Service	99
adrift (No. 106)	234	radio operators aboard lighthouse vessels	172
distance finding mechanism	38	Radiotelephone, use of, at light stations	273
radio fog signal	83, 87	Ram Island Lightship (No. 23) replaced by gas and bell buoy	75
Narrows Light Station, Boston, Mass., fire	301	Range light apparatus, effective and economical	300
Nautical almanac	23	Raspberry Island Light Station, Wis., keeper stands by disabled fleet	301
Naval architecture and marine engineering, course	62	Reamy, Milton, obituary	109
Neon lights, tests of visibility	281	Rebecca Shoal, Fla., automatic light	164
New Britian, S. S., assisted by radio compass	163	Reflectors, on Haines Point buoy	219
New Dungeness Light Station, Wash., pile revetment to arrest erosion	96	Regulations, for Lighthouse Service	123
keepers render assistance	308	for uniforms	260
Newfoundland radio fog signals	44	Relief of buoys and inspection of stations, report	183
Newton, William, retirement	84	Remote-controlled fog signal	307
New Zealand, radio direction finding reports	113, 162	Retirement act, civil-service amendment	145
first beacon established	177	Retirement, disability	76
Nolen, T. J., obituary	80	Rhode Island lighthouses	47
Norge uses radio compass in transpolar flight	137	Riprap prevents erosion at Brant Point	108
Northeast End, new Diesel lightship for (111)	177	Roofs, marking lighthouse, for seaplanes	135
Notices to mariners, for Great Lakes	237	Rosa, Domingo Suarez, obituary	94
O'Hagan, Thomas P., retirement	89	Rose, tender, aids deer in river	146
O'Leary, Francis A., aids in St. Francis Dam disaster	241, 242	Round Island Lighthouse, England, experimental radio fog signal	79
Ontario, Lake, storm	287	Ruffhead, Frederick C., obituary	140
Organization of Lighthouse Service	40,	Russell, Richard, retirement	64
70, 143, 204, 244, 290		S-51, buoy to mark wreck	99
Overfalls Lightship (101), new color approved by mariners	119	Sabine Pass Lighthouse, La., hawk in lens room	23
Pacific coast radio fog signals	83	St. Francis Dam disaster	241
Paint, heat transmission	34	St. George Reef Lighthouse, Calif., damage	10
burning with blow torches	305	St. Johns River Light Station, Fla., semi-automatic radiobeacon	254
Panama Canal radiobeacons	307	Sakonnet Light Station, R. I., storm damage	47
Passage Island Lighthouse, Mich., radio used during illness of keeper's wife	129	Samoa, new lights established	187, 212
Peach Island, Mich., explosion of acetylene gas, and fire	227	San Diego Bay Beacon, remote-controlled fog signal	307

	Page		Page
Radio compasses, demonstration on Amaranth	116	Sandy Hook Light, N. J., history	17
good results obtained	21, 29, 118	Sankaty Head Light, Mass., unusual visibility	87
importance of, on board ship	55	Santa Barbara, Calif., earthquake wrecks lighthouse	83, 87
importance of unidirectional feature	223	Schneider, J. A., perishes	155
in mid-ocean rescue	99	Scotland Lightship (No. 11) retired from service	105
in rescue of S. S. Florida	275	Sea water, effect on glass	5
on French vessels	13	Seal Island, Canada, radio fog signal	22
ship captains praise	142	Second district, office moved	144
use of, by S. S. Harry Yates	238	exhibition of lighthouse apparatus	238
use of, in Alaska	226	has economically equipped shops	163
used on airship Norge	137	Semiautomatic radiobeacon at St. Johns river	254
value of, in navigation	75	Sesquicentennial, lighthouse exhibit	141, 173
Radio direction finders, Lloyds recognizes importance	55	Lighthouse Service awarded grand prize	1, 3
reports	113, 162	Seventh district, change in limits	76
use of, in locating sinking vessel	79	Ship Island Lighthouse, Miss., lightning damage	297
Radio fog signals, abroad	4, 9	Ship Shoal Light Station, La., tidal wave	23
additional service on Nantucket Lightship	51	Simplified marine practice	41
Canadian signal at Seal Island	22	Sixteenth district, cooperates in aerial survey of Alaska	308
experimentally established on coast of England	79	Sombrero Key Lighthouse, Fla., radio receiving set	280
extend service on important lightships	4	Sound, effect of weather conditions	219
fog and the radio	43	Southeast Shoal Lighthouse, Lake Erie, Canada	287
in Bay of Fundy	10	radiobeacon	211
Nantucket signals approved	83	South Haven, Mich., illuminated beacon	17
new signal on coast of France	116	South Pass Jetty Lights, La., light keeper missing	23
on Great Lakes	83, 106	Southwest Pass, La., new fog signal and radiobeacon	317
on Nantucket Lightship found useful	87	Spain, two new radio fog signal stations	106
on Pacific coast	83	Stannard Rock, lighthouse repairs	51
on the coast of France	63	use of radiotelephone	273
test of tube transmitters and investigation of night effect	27	Steel-pile dolphins	4
tube transmitter on Ambrose Channel Lightship	21	Sterling, Charles A., gets life-saving medal	91
two new stations on coast of Spain	106	awarded second service bar	250
used by S. S. Columbus	79	Sterling, James W., obituary	21
usefulness	21	Stoddard, Capt. Lewis M., obituary	289
Radio operators aboard lighthouse vessels, radio talk	172	Stonington Harbor Lighthouse, Conn., now a museum	296
Radio sets, donated to light stations and vessels	118, 129	Sturgeon Bay Canal Light Station guides vessels in fog	255
advantages of, at isolated stations	129	Sturgeon Bay Lighthouse, foundation	109
lightkeepers supplied	279	Suarez, Rosa Domingo, obituary	94
Radio talks, Our Lighthouse Service	99	Sumac, tender, transmits radio messages during wrecking operations	180
radio operators aboard lighthouse vessels	172	Sundew, tender, recovers valuable buoy	305
Radiotelephone, use of, at light stations	273	Superior, Lake, unusual visibility	140
Ram Island Lightship (No. 23) replaced by gas and bell buoy	75	Swedish radiobeacon stations	140
Range light apparatus, effective and economical	300	Synchronized fog-signal tests	291
Raspberry Island Light Station, Wis., keeper stands by disabled fleet	301	Synchronizing of radiobeacons on Great Lakes	303
Reamy, Milton, obituary	109	Tate, W. J., connection with pioneering in aviation	272
Rebecca Shoal, Fla., automatic light	164	Tenders (see also Vessel repairs, and vessels by name), new lighthouse tender for Ohio River	38
Reflectors, on Haines Point buoy	219	Tenth district, new headquarters	5
Regulations, for Lighthouse Service	123	Termites or white ants, preventing damage	232, 235
for uniforms	260	Third district, storage bins for small articles at general depot	178
Relief of buoys and inspection of stations, report	183	fire at general depot	195
Remote-controlled fog signal	307	Tillamook Rock Lighthouse, Ore.	56
Retirement act, civil-service amendment	145	Tongue Point Depot, Ore., dredging	179
Retirement, disability	76	Tool for preparing holes in rock bottom	118
Rhode Island lighthouses	47	Toomey, Alexander D., obituary	76
Riprap prevents erosion at Brant Point	108	Trieste, Italy, memorial lighthouse	198
Roofs, marking lighthouse, for seaplanes	135	Tubbataha Reef Light Station, Philippines	253
Rosa, Domingo Suarez, obituary	94	Tube transmitters, test of "night effect"	27
Rose, tender, aids deer in river	146	Tull, Ernest C., obituary	155
Round Island Lighthouse, England, experimental radio fog signal	79	Tupper, Arthur W., obituary	143
Ruffhead, Frederick C., obituary	140	Uniformity in buoyage and other navigational aids	157
Russell, Richard, retirement	64	Uniforms, regulations	260
S-51, buoy to mark wreck	99	Virgin Islands, storm damage	46
Sabine Pass Lighthouse, La., hawk in lens room	23	Visibility, of Cape Ann Lights, Mass.	38
St. Francis Dam disaster	241	at Nantucket Lightship	87
St. George Reef Lighthouse, Calif., damage	10	of California lights	79
St. Johns River Light Station, Fla., semi-automatic radiobeacon	254	of neon lights	281
Sakonnet Light Station, R. I., storm damage	47	on Lake Michigan	84
Samoa, new lights established	187, 212	on Lake Superior	140
San Diego Bay Beacon, remote-controlled fog signal	307		
San Francisco Federal Business Association addressed by superintendent	102		
San Juan Depot, P. R., terrific hurricane	263		
Sands Point, N. Y., station passes out of existence	17		

	Page		Page
Water gage at Detroit River Light Station, Mich.....	52	Whale Rock Light Station, R. I., storm damage.....	47
Water Lily, tender, retirement of master, John A. Helander.....	88	Whistle in use 20 years.....	231
Weather reports, new schedule of broadcast- ing on Pacific coast.....	181	White ants or termites, preventing damage...	232
Webb Institute, offers courses in naval archite- cture and marine engineering.....	62	Whitefish Point, Mich., earthquake shock...	73
Wellington, S. S., burned near Diamond Shoals Lightship.....	260	Whitewash, quantity and covering capacity...	220
West Chop Light, Mass., flies extinguish....	176	Willow, tender completed.....	222
West Indies, hurricane.....	42	Wind-driven electric plant at Arecibo Light Station, P. R.....	247
inspection trip.....	77	Windy Point Light Station, La., keeper stays on job.....	198
Westphalia, S. S., experience with radiobeaa- cons and radio compass.....	122	Woodruff, E. L., gets architectural honor....	309
rescue of S. S. Alkaid.....	121	Wrought-iron and cast-steel anchor chain compared.....	217
Wet walls and efflorescence.....	282	Wynoble, Everett, gets life-saving medal....	91
		Younghans, Maria, obituary.....	96

DEPARTMENT OF COMMERCE
BUREAU OF LIGHTHOUSES

INDEX TO LIGHTHOUSE SERVICE BULLETIN, VOLUME IV

(1930-35)

	Page		Page
A Century of Progress, lighthouse exhibit at.	153, 158	Au Sable, Mich., rescue of ship's crew	3
Abecon, N. J., visitors	92, 142	Automatic fog bell striker at Cheboygan Crib	109
<i>Acacia</i> , carries serum to Virgin Islands	171	Automatic gas control for isolated lights	91
grounds in hurricane	137	Automatic light in Hawaii burns for 19 years	
Accounting system, new	29	without being extinguished	56
Acetylene apparatus, automatic gas control		Automatic light on Navassa Island	12
for isolated lights	9	Auxiliary cooling equipment for circulating	
conversion of Pintsch gas buoys	101	water at fog signal stations	166, 194
lightning strikes gas lines	41	Back in 1884	54
long distance piping at Navassa	75	Baltimore Harbor, Md., lights electrified	5
Molokini burns 19 years	56	Barbers Point, Hawaii, efficiency flag awarded	203
Navassa Island	12	new structure completed	172
Addresses, by H. D. King at Detroit	45	Barnegat lighthouse on the coast of New	
by G. R. Putnam	92	Jersey	151
by R. R. Tinkham	84	Battleship <i>California</i> aids injured wife of light-	
on lighthouses	174	house keeper	196
on lighthouses by Mr. Stevenson, of Scot-		Bees hive in lantern three-fourths mile from	
land	137	land	82
Airplane, delivers Christmas packages to		Bell Rock Lighthouse	122
Maine lighthouses	198	Belle Isle, Mich.	217
assistance in locating sunken gas buoy	126	Bennetts, Noah, retirement	154
Airships, <i>Akron</i> flight on Pacific coast	139	<i>Berkshire</i> , S. S., favorable comment on radio-	
buoy marks wreck of <i>Akron</i>	151	beacons	109
Airways, airways division transferred	155	Billingsgate, Mass., new light structure	69
mail pilot uses new radiobeacon	62	Blunts Reef Lightship, takes station	23
survey of northern airway	75	Boston, Mass., repairs at Boston light station	102
<i>Akron</i> , airship, buoy placed to mark wreck	151	Bowerman, Horatio B., retirement	157
flight of, on Pacific coast	139	<i>Bremen</i> , S. S., hears radiobeacon 2,289 miles	109
Alaska, Cape Decision light station	119	Brick walls, water penetration	68
design of unattended lights	85	Bridgeport Harbor, Conn.	83
good use of radiobeacons	142	Brisbin, William T., death	57
keepers commended for rescue	152	Broadcasts. <i>See</i> Radio Broadcasts.	
use dog sled to reach Cape Darby	175	Browns Point Lighthouse, Wash., historic	
Allen, Capt. Joseph, death	33	marker placed	188
Allotments for public works in the Lighthouse		Brush, C. C., appointed superintendent	169
Service	63	Buffalo, N. Y., improvements at depot	169
<i>Aloma</i> , schooner, shipwrecked crew reach		radio broadcast from lighthouse	210
Nantucket Lightship	61	Buoy under water 2 years	223
<i>Amaranth</i> , assists passenger vessel	154	Buoy with automatic bell striker functions	
communicates with German seaplane	88	even when entirely submerged under the	
signals strange beam of light on Lake Michi-		ice	173
gan	46	Buoyage conference	37, 47
Ambrose Lightship shifted in position	4	Buoyage system of the United States	69
Anacapa Island, Calif., battleship aids injured		Buoyage, uniformity of, international uniform-	
keeper's wife	196	ity	183
favorable comments on fog signal	149	list of publications on	185
gale strikes station	141	origin of buoy coloring	47
new primary station on the coast of Cali-		Buoys, an arrangement of flashing lights	115
fornia	123	bees hive in lantern	82
Annual report, 1930	48	conversion of Pintsch gas	101
1931	95	designation of	53
Appointments. <i>See</i> Promotions.		flashing lights for	203
Aransas Pass, Tex., dust storm at	208	hornets extinguish gas buoys	24
<i>Arbutus</i> , tender, launched	149	odd and even numbers of flashes	119
Arrangement of flashing lights to facilitate		placed to mark wreck of <i>Akron</i>	151
navigation	115	sea lions perch on	160
Artesian well at New Dungeness, Wash.	97	special type withstand ice	174
Articles on work of Lighthouse Service	98	suggested arrangement of flashes	131
Assateague, Va., electrification	157	test of new whistle valve	24
<i>Aster</i> , tender, recovers wreckage of plane	214	tests of electric lighted	209
Atlantic coast lighthouses observed from		use of green lights on	111
Mount Washington	150	undamaged by winter's submergence	68

	Page		Page
Buoys, recovery of, after winter's submergence.....	68	Consolidation of river lighting administration at St. Louis.....	162
airplane of assistance.....	126	Construction of jetties to stop beach erosion in the third district.....	147
Canadian buoy.....	55	Construction of new first district depot begins.....	56
Chesapeake Bay.....	143	Continuous wave equipment for radiobeacons and radiocompasses.....	59
Coquille River.....	106	Conversion of Pintsch gas buoys to acetylene type.....	101
Cuban buoy.....	163, 165	Conway, John S., retirement.....	12
Massachusetts coast.....	10	Cooperation, <i>Acacia</i> assists grounded steamer.....	154
Matanilla Shoals buoy.....	17	<i>Aster</i> recovers wreck of plane.....	214
New York Harbor.....	4	depot force aids Navy planes.....	85
Pacific coast.....	187	<i>Iry</i> assists steamer.....	200
prompt replacement.....	176	museum investigations assisted.....	200
under water 2 years.....	223	<i>Sumac</i> recovers caissons.....	46
Cable laying, by the Lighthouse Service.....	164	value of.....	45
twelfth district.....	189	<i>Wakerobin</i> assists ferry.....	89
Calumet Harbor, Ill., riprap protection for station.....	125	with Census Bureau.....	24
Canada, Canadian buoy recovered.....	55	with Forest Service.....	24
radiobeacon cooperation with.....	108, 221	with Canada as to radiobeacon frequencies.....	108
commissioner of lights visits Washington.....	145	Coordinated operation of maritime radio beacons of the United States and Canada.....	221
Candlepower, increase, on lightships.....	29	Coquille River, buoy drifts 200 miles.....	106
Navesink again most powerful light.....	83	Cross Over Island, N. Y., keeper rescues two boys.....	133
test at Dry Tortugas light station.....	120	<i>Cypress</i> , tender, improved by overhaul.....	160
Cape Ann, Mass., improvements and discontinuance of twin light.....	118	recovers Cuban buoy.....	163, 165
unusual visibility at.....	125	Death of keeper, at isolated Alaska light station unknown for days.....	146
Cape Canaveral, Fla., electrification.....	92	from coal gas.....	177
Cape Cod, Mass., number of visitors.....	170	Delaware Bay, improvements at Ship John, etc.....	101
Cape Darby, Alaska, use dog sled to reach.....	15	party given shelter at Fourteen Foot Bank.....	96
Cape Decision light station, Alaska.....	119	Delaware River, quick flashing lights for.....	167
Cape Flattery, Wash., electrification.....	137	Depot force aids Navy planes during forced landing in the Columbia River.....	85
Cape Henry, Va., old lighthouse to be preserved.....	31	Depots, additional shop building at Detroit.....	16
Cape Kumukahi, T. H., new lighthouse completed.....	173	additional wharf at Woods Hole, Mass.....	101
Cape Lookout Lightship struck by September hurricane.....	40	construction at Portland, Maine.....	56
Cape Lookout, N. C., electrification.....	162	discontinuance of Port Eads, La.....	226
storm damage.....	41	improvements at Buffalo, N. Y.....	169
Cape May, N. J., prizes for gardens.....	89, 142	improvements at Galveston, Tex.....	138
Cape Romain, S. C., electrification.....	92	moved to Sault Ste. Marie, Mich.....	180
station is modernized.....	96	new buildings at Goat Island, Calif.....	55
Car ferries, use of radiobeacons.....	60	New Orleans depot piling.....	217
Cat Island, Miss., lightning strikes gas lines.....	41	new roof at Portsmouth, Va.....	21
Caution as to the need of care in approaching lightships on radio bearings.....	174	progress at various depots.....	103
Census Bureau, cooperation with.....	24	purchase of sites authorized.....	38
Century of Progress Exposition.....	153, 158	Designation of buoys.....	53
Chambers Island, Wis., use skis to reach station.....	56	Detour Reef, Mich., distance finding signals.....	27
Changes in superintendents. See Superintendents.....		new station.....	99
Characteristic regulators, electric control for.....	118	station, 50 percent completed.....	52
Charleston, S. C., district offices moved.....	201	Detroit, Mich., depot, additional shop building.....	16
encasement of piles at depot.....	147	development of radio apparatus.....	9
Cheboygan Crib, Mich., performance of fog bell striker.....	109	Detroit River, Mich., Livingstone memorial lighthouse.....	23
Chelsea, Mass., chief coordinator visits.....	24	radiotelephone brings aid.....	121
purchase of land for depot authorized.....	38	radiotelephone valuable in emergency.....	53
<i>Cherry</i> , tender, completed.....	139	Windmill Point light completed.....	165
under construction.....	56	Diamond Shoal Lightship, not damaged by storm.....	40
China, coastwise lights.....	202	President commends crew.....	163
Civil works projects.....	180	returned to station undamaged.....	142
Clark, Thaddeus S., death.....	76	survives violent hurricane.....	161
Closing of navigation on Great Lakes, aids removed without loss.....	141	Diaphones, test of two-tone.....	81
severe storms in 1930.....	7	Diesel electric lightships, Blunts and Swiftsure take station.....	29
Coal barge built at lighthouse depot.....	6	Diesel lightships, lightship 79 being converted.....	76
Coal gas, keeper dies from effects.....	177	Dillon, F. P., appointed eleventh superintendent.....	160
Cockspur Island, Ga., eagles make home in tower.....	180	Direction finders. See Radio Direction Finders.....	
Collisions, radio bearings lessen risk.....	53	Directional wireless, methods of adaptation.....	64
Colored lights (see also Green Lights), marking harbor entrances.....	179	Disasters, radio used when lightship 58 sinks shipwrecked crew take refuge on Nantucket Lightship.....	66
Columbia River, depot force aids Navy planes, unusual ice jam.....	85	Distance finding signals, at Whitefish Point and Detour.....	27
<i>Columbine</i> , tender, launched.....	11	further test on Great Lakes.....	84
under construction.....	56	Pacific coast observations.....	225
Commended, by Secretary Lamont.....	95	review of history.....	51
for heroic rescue.....	82	signals found accurate.....	84
Commerce building, Lighthouse Service moves to.....	103	used effectively on Great Lakes.....	80
Conferences, at Lisbon, Portugal.....	37, 47, 59	Distance obtained by new synchronized signals found accurate.....	84
at Paris, France.....	63		
Canadian commissioner visits United States.....	145		
eleventh superintendents'.....	108, 112		
radio conference.....	136		
twelfth superintendents'.....	200		

	Page		Page
District limits, changes in second and third.....	157	Federal business associations, Eaton elected president.....	46
rearrangement of Mississippi River districts.....	145	Tinkham elected president.....	158
river districts consolidated.....	162	Fenwick Island Lightship, fishing party takes refuge on.....	121
District officers, radio talks.....	30	party takes refuge on.....	53
sixteenth superintendent visits Washington.....	68	Fifth district, completes electrification of all primary seacoast lighthouses.....	168
Dog sled used in maintenance of remote Alaska light.....	175	office moved to Norfolk.....	200
Dolby, George E., death.....	126	Fire Island Lightship, arrives at Staten Island, on voyage from Pacific coast.....	40
Doublet lenses, new 36-inch type.....	73	Fires, Five Finger light station destroyed.....	168
Drifting buoy located within an hour of arrival of tender.....	165	Hibiscus extinguishes forest fire.....	187
Dry Tortugas, Fla., canolepower test.....	120	threaten station buildings at Ediz Hook light station, Wash.....	84
electric incandescent lamp test.....	80	Fishing areas, marking.....	85
unusual visibility at.....	226	Fishing party takes refuge on Fenwick Island Light Ship.....	53, 121
Dust storms, at Aransas Pass, Tex.....	208	Five Finger, Alaska, keepers commended for rescue.....	152
in Oregon and Washington.....	74	station destroyed by fire.....	168
Eagles make home in old light tower.....	180	Flagpole and light mast at Belle Isle, Mich.....	217
Early suggestions for the use of mobile radiobeacons as warning signals against collision.....	138	Flashing lights, an arrangement of flashing lights.....	115
Early use of radio for distress signals.....	81	odd and even numbers of flashes.....	119
Earthquakes, at Punta Gorda, Calif.....	68	suggested arrangement of.....	131
California.....	149	Flight of <i>Akron</i> on the Pacific coast.....	139
East River Range, N. Y., shown in daytime.....	66	Flood, Thomas, retirement.....	209
Eaton elected president.....	145	Florida Reefs, emergency repairs follow hurricane.....	222
Economy, necessity for savings.....	125	numerical system for lights.....	72
resourcefulness of keeper.....	84	radiocompass used in locating vessel in distress.....	2
Ediz Hook, Wash., fire threatens station.....	217	tanker sinks at Fowey Rocks.....	170
Effect of lightning stroke on ship's compass.....	217	unusual visibility of lights.....	174
Effect of radiobeacons on the safety of navigation.....	72	wrecks on.....	138
Efficiency of tender <i>Linden</i>	102	Fog, at Point Reyes, Calif.....	142
Efficiency stars and pennants, awarded to Barbers Point.....	208	hours of.....	5
for 1931.....	61	prevalence of.....	57
method of awarding.....	106	travels against wind.....	68
Einstein and applied science.....	67	Fog bell striker, at Cheboygan Crib.....	109
Elbow of Cross Ledge, Del., improvements.....	101	Fog signal investigations of Joseph Henry.....	136
Eldred Rock, Alaska, death of keeper unknown for days.....	146	Fog signals, at Anacapa Island, Calif.....	149
Electric control for characteristic regulator.....	118	at San Francisco entrance operated on account of snow for the first time on record.....	144
Electric incandescent lamps under test at Dry Tortugas.....	80	auxiliary cooling equipment for.....	166
Electric lighted buoys, tests.....	209	auxiliary cooling equipment.....	194
Electrification, Assateague, Va.....	57	emergency characteristic device.....	102
Baltimore Harbor.....	92	keeper sounds by hand.....	156
Cape Canaveral, Fla.....	137	performance of fog bell striker.....	109
Cape Flattery, Wash.....	162	remote controlled.....	216
Cape Lookout, N. C.....	92	test of two-tone diaphone.....	81
Cape Romain, S. C.....	168	Foreign services, Bell Rock Lighthouse.....	122
fifth district.....	100	coastwise lights of China.....	202
Grays Harbor, Wash.....	92	cooperation with Canada.....	108
Hillsboro Inlet, Fla.....	92	English quick flashing lights.....	119
Eleven Foot Shoal Lightship, <i>Sumac</i> recovers moorings lost 35 years.....	53	German test laboratory.....	71
Eleventh conference of lighthouse superintendents.....	112	Irish coast radiobeacon.....	55
Eleventh district depot moved to Sault Ste. Marie, Mich.....	180	Italy establishes radio range.....	112
Emergency characteristic device for fog signals.....	102	Japan establishes radiobeacons.....	119
Encasement in concrete of crosoted piles under wharf at Charleston lighthouse depot.....	147	Pharos of Alexandria.....	171
England, experiments with quick flashing lights.....	119	Scottish engineer visits United States.....	139
Erosion, construction of jetties to stop.....	147	some notes on.....	131
<i>Exeter City</i> , S. S., radio bearings used in rescue.....	144	talk on Scottish lighthouses.....	137
Expenditures during fiscal year 1932.....	79	Uruguay establishes radiobeacons.....	139
Experience in using radiobeacons especially in approaching lightships.....	181	Venezuela establishes new aids.....	21
Experiments in England with special quick flashing lights.....	119	Forest Service, cooperation with.....	24
Expositions, A Century of Progress.....	153, 158	Former Secretary Redfield.....	141
Ketchikan, Alaska.....	228	Fort Point light station discontinued.....	196
lighting convention.....	196	<i>Fort Victoria</i> , S. S., marking of wreck.....	7
New York, N. Y.....	228	Forty Mile Point, Mich., test of two-tone diaphone.....	81
Portland, Oreg.....	228	Fourteen Foot Bank, Del., teacher and pupils given shelter.....	96
Seville, Spain.....	21	Fowey Rocks, Fla., improvements at.....	87
Fairport, Ohio, tablet placed on old lighthouse.....	158	life of wrought iron rods.....	152
Famous waving girl to abandon long vigil.....	74	tanker sinks at.....	170
Farallon Islands, Calif., life saving equipment.....	16	France, lighthouse heroine dead at 70 years.....	223
radio broadcast from.....	110	From the outside looking in.....	218
Farrow, Patillo, death.....	81	Frying Pan Shoals Lightship; moving.....	32
retirement.....	81	Gale strikes Anacapa Island (Calif.) light station.....	141
Favorable comment, on Anacapa Island (Calif.) fog signal by steamship captain.....	149	Gallant work of lighthouse keepers in December blizzard.....	143
on radiobeacons.....	29, 109	Galvanized wrought-iron pipe structure for minor lights.....	167, 193
on west coast radiobeacons.....	46	Galveston, Tex., improvements at depot.....	138

Page		Page
	Garraty family makes notable record as lighthouse keepers	224
9	Gas valve, acetylene automatic gas control valve	
10	Gay Head, Mass., number of visitors	
170	Georgia, unusual visibility of lights	
41	Gerlof, Robert, death	
71	German lighthouse service test laboratory	
88	German seaplane, <i>Amaranth</i> communicates with	
	Goat Island. See Yerba Buena.	
	Grand Island Range, N. Y., shown in day-time	66
156	Graves, Robert C., retirement	
100	Grays Harbor, Wash., electrification	
	Great difficulties encountered in recent construction of Point Ritidian Light, Guam	152
	Great Duck Island, Maine, keepers commended for rescue	95
141	Great Lakes, aids removed without loss	
7	closing of navigation, 1929	
27	distance finding	
80	distance finding signals used	
1	guiding ships by radio	
49	hourly radiobeacon schedule	
	how Lighthouse Service keeps pace with growth of marine trade	43
217	important improvements on	
60	navigation of car ferries	
66	new radiobeacon charts	
109	percentage of radio compass equipped vessels radiobeacons increase safety	
208	report on fog signals	
56	skis needed to reach Chambers Island	
	special uses of radiocompasses and radiobeacons	13
84	test of distance finding	
56	unusually mild weather	
145	use of mobile radiobeacons	
206	work of Lighthouse Service on	
151	Green lights, at Kauhola Point, Hawaii	
179	comments of shipmaster on	
111	for buoys and other aids	
134	for St. Johns River	
151	Lake carriers' comments	
150	pilots find satisfactory	
156	<i>Greenbrier</i> , tender, assists flood victims	
209	Greetings from Colonel Johnson	
210	Gregg, Tom H., retirement	
142	Gregory, Capt. William E., death	
	Guarding against collision by the use of radio warning signals	127
	Guiding ships by radio	1
	Gunn, Amherst E., retirement	110
	Hagen, Carl L., death	154
74	Hailstorm at Old Point Comfort, light station	
54	Handkerchief Lightship, in 1884	
102	Haskins, Paul S., death	
20	Hawaii, inspection of Molokai	
67	Lehua highest light	
172	Navy planes use Makapu'u radiobeacon	
173	new light at Cape Kumukahi	
154	Hedge Fence Lightship	
136	Henry, Joseph, fog signal investigations	
154	Herbert, Capt. Fred, death	
187	<i>Hibiscus</i> (tender) extinguishes forest fire	
67	Highest light	
92	Hillsboro Inlet, Fla., electrification	
	Historical notes regarding Nantucket Lightship station	179
	<i>Holly</i> , last of the coast side-wheel lighthouse tenders	113
196	Honolulu Harbor, T. H., old light at	
	Hopkins, L. M., appointed fifth superintendent	12
24	Hornets extinguish gas buoys	
31	Hospital facilities extended to retired employees	
5	Hours of fog at light stations during the last year	
35	How science serves the mariner	
43	How the Lighthouse Service has kept pace with the growth of marine trade	
137	Hurricanes, <i>Acacia</i> grounds	
40	Cape Lookout Lightship struck	
161	Diamond Shoal Lightship in	
40	Diamond Shoal Lightship not damaged	
20	following course by radiocompass	
222	seventh district performs relief work	
	Ice, buoy functions under	173
	conditions cause food shortage at Stepping Stones Lighthouse, N. Y.	172
	heavy ice at Overfalls	173
	metal buoys withstand ice	174
	severe on north Atlantic coast	171
	storm at isolated station in Lake Superior	8
	transporting power	176
	unusual jam in Columbia River	11
	Ida Lewis lamp returned to Newport	142
	Illuminating apparatus, at Turn Point, Wash.	6
	Improvements, at Buffalo lighthouse depot, N. Y.	169
	at Fowey Rocks light station, Fla.	87
	at Southwest Pass of the Mississippi River	33
	in aids to navigation	151
	in Delaware Bay aids to navigation	101
	in lightship radio facilities	215
	made at Galveston depot	138
	of Cape Ann Light, Mass.	118
	on Lake Ontario	226
	Increase intensity of masthead lights	29
	Inland waterways, aids to navigation on	92
	Inspections, Molokai, Hawaii	20
	inspector uses aeroplane	24
	Insurance rates, radiobeacons as factors in	60
	International conference on uniformity of buoyage	37
	International lighthouse conference to be held at Paris	63
	International recommendations as to radiobeacons approved at the Lisbon conference	59
	International uniformity of buoyage	183
	Intracoastal waterway, address on, by G. R. Putnam	92
	recently dredged portions marked	52
	uniform method of marking	213
	Ireland, radiobeacon established	55
	<i>Iris</i> , tender, rescue eight from burning yacht	31
	Island lighthouse reservations off southern California	197
	Italy establishes experimental radio range for marine use	112
	<i>Ivy</i> , tender, assists steamship	200
	Jack bits, drilling in concrete and rock	187
	Japan establishes four new radiobeacons	119
	Japanese training ship, address by superintendent	84
	<i>Jasmine</i> , tender, completed	211
	James River, Va., marking of new channels	134
	Jetties, to stop erosion	147
	Johnson, Capt. John P., retirement	46
	Kalae, Hawaii, wind-driven electric generator	6
	Kauhola Point, Hawaii, new alternating red and green light	151
	new structure completed	155
	Keeper completes 2-year task of encasing piles	70
	Keeper sounds fog bell by hand for 2 nights	156
	Kerosene lights, seventh district replaces last	188
	Key West experiences unusual shortage of tides	176
	Kilauea Point, Hawaii, radiobeacon installed	31
	King, H. D., appointed deputy commissioner	12
	appointed commissioner	213
	King, H. D. (addresses and articles by) from the outside looking in	218
	how science serves the mariner	35
	minding our business	228
	personnel administration	211
	value of cooperation	45
	<i>Kiowa</i> , S. S., rescue of ship's crew	3
	<i>Kronprins, Gustaf Adolf</i> , S. S., radiocompass used in locating	60
	Lake Borgne, Miss., keeper encases piles	70
	Lake Huron, Detour light station	52, 99
	history of Garraty family	224
	Poe Reef light station	15, 19, 139
	radiotelephone communication	104
	Lake Michigan, navigation of car ferries	60
	special uses of radiobeacons	13
	unusual visibility of lights	182
	winter use of mobile radiobeacons	145
	Lake Ontario, improvements	226
	Lake Superior, ice storm at Stannard Rock	3
	rescue of crew of S. S. <i>Kiowa</i>	3
	Large number of vessels using Straits of Florida	77

Page		Page
189	Laying of electric power and control cables	
6	Lazaretto Depot, Md., coal barge built	
182	Legislation, affecting Lighthouse Service	
67	Lehua, Hawaii, highest light	
73	Lenses, new 36-inch type	
	Lessening the risk of collision by use of radio bearings	53
54	Lifeboats, radio equipment	
16	Lifesaving equipment at Farallon Islands lighthouse	
91	Lifesaving medals, seaman from <i>Marigold</i> gets	
60, 152	Light lists, new editions	
196	Lighthouse, The (poem)	
223	Lighthouse heroine dead at 70 years	
39	Lighthouse Service, 20 years' progress	
107	Washington and early lighthouse work	
	Lighthouse tenders. See Tenders.	
217	Lightning, effect on ship's compass	
41	strike gas lines of automatic light	
24	strikes Point No Point light station	
38	Lightship No. 1, a noble veteran	
32	Lightship 75 years old soon to be retired	
4	Lightships, Ambrose shifted	
174, 181	approaching on radiobeacon bearings	
40	Cape Lookout in hurricane	
40	Diamond Shoal not damaged	
142	Diamond Shoal undamaged	
66	early history of radio on	
88	early use of radio distress signals	
53	Eleven Foot Shoal's mooring recovered	
40	Fire Island arrives at Staten Island	
4	Fire Island enroute from Pacific	
54	Handkerchief back in 1884	
154	Hedge Fence	
215	improvements in radio facilities	
29	increase in candlepower	
32	moving of Frying Pan Shoals	
79	No. 73 extensively overhauled	
76	No. 79 being converted to Diesel drive	
32, 38	No. 1 soon to be retired	
61, 66	shipwrecked crew on Nantucket	
64	<i>Swiftsure</i> in severe storm	
29	two new Diesel lightships on station	
143	Umatilla Reef off station	
154	<i>Lilac</i> , tender, launched	
102	<i>Linden</i> , tender, efficiency	
41	keel laid	
65	launched	
80	trial trip	
169	Liner collides with Nantucket Lightship	
37, 47, 59	Lisbon conference	
2	<i>Livingston Roe</i> , S. S., uses radiocompass	
45	Livingstone Memorial Lighthouse, Mich., H. D. King's address on	
23	in commission	
97	Long Beach Breakwater Light	
75	Long distance piping of acetylene gas at Navassa Island	
156	Long Point, Mass., keeper sounds bell by hand	
106	Lost buoy drifts nearly 200 miles to its home port	
81	Louisiana lighthouses damaged by storm	
150	Luther, Oscar C., retirement	
62	Mail pilot uses new airways radiobeacon	
172	Makapu'u radiobeacon utilized in flight of Navy planes to Hawaii	
182	Manitou Island, Mich., radiotelephone of value in emergency	
109	Mantle burners on standard service lamps	
8	Manyon, Norman C., made ninth superintendent	
3	<i>Manzanita</i> , tender, makes stormy trip	
91	<i>Marigold</i> , tender, seaman gets lifesaving medal	
85	Marking fishing areas	
7	Marking of wrecks in New York Harbor	
17	Matanilla Shoals, British West Indies, buoy recovered	
195	Maximum usefulness of ship's radio equipment	
76	<i>Mayflower</i> , tender, saves small boy from drowning	
	Memorial to members of crew of Nantucket Lightship (No. 117)	208
13, 208	Miles, Thomas J.	
228	Minding our business	
	Minor lights, galvanized wrought-iron structures	167, 193
	photoelectric cell controls	110
	photronic cells found satisfactory	152
	steel sheet caisson foundation	189
	Minots Ledge, Mass., seventy-fifth anniversary	227
	Mirage of lighthouse seen in sky	134
	Missing teacher and pupils given shelter at Fourteen Foot Bank light station, Del.	96
	Mississippi River, improvements at South-west Pass	33
	Port Eads depot discontinued	226
	rearrangement of work on	145
	river districts consolidated	162
	<i>Wakerobin</i> assists ferry	89
	waterspout at South Pass	81
	Mobile radiobeacons, early suggestions for use	138
	further tests	135
	guarding against collision with	127
	on Lake Michigan	145
	use of to avoid collision	111
	Modern transmitters for radiobeacons on stations and vessels	202
	Molokai, Hawaii, inspected	20
	Molokini, Hawaii, light burns 19 years	56
	Monteiro, John R., death	5
	Moore, Joseph H., death	158
	Moorings, Nantucket Lightship parts	146
	overhand knot in chain	150
	repairing worn shackles	162
	<i>Sumac</i> recovers those of Eleven Foot Shoal Lightship	53, 121
	Mount Desert Rock, Maine, new radiobeacon	106
	transport garden 27 miles to sea	188
	Mount Washington, N. H., visibility of lights from	150
	Museum investigations, tender <i>Cypress</i> assists	200
	<i>Myrtle</i> , tender, bids asked for	92
	Nantucket Lightship, historical notes on	179
	memorial to crew	208
	parts moorings	146
	S. S. <i>Washington</i> collides with	169
	shipwrecked crew take refuge on	61, 66
	sinking	179
	Nantucket Lightship (No. 58), radio distress signal	88
	Nature's lighthouse	176
	Navassa Island, automatic light on	12
	long distance piping	75
	Navesink again becomes most powerful of American lighthouses	83
	Navigation by radiobeacons during a severe storm	67
	Navigation of car ferries greatly facilitated by radiobeacons	60
	Navigational aids in eleventh district removed without loss of equipment	141
	Nawillwill Harbor, T. H., new structure planned	134
	structure completed	146
	New accounting system is to be installed	29
	New alternating red and green light visible for long distance	151
	New communication system found useful	126
	New Dungeness light station artesian well	97
	New offices for sixth lighthouse district, and account of historic building recently vacated	201
	New Orleans lighthouse depot piling	217
	New type of 36-inch revolving beacon	73
	New York Harbor, marking of wrecks	7
	Newport, R. I., Ida Lewis lamp returned	142
	Norfolk, Va., district offices moved	200
	North Head, Wash., wild duck breaks glass	126
	Norvell, Mrs. Maggie R., retirement	126
	Numerical system for the lights of the Florida Reefs	72
	Obituaries, Allen, Joseph	33
	Brisbin, William T.	57
	Clark, Thaddeus S.	76
	Dolby, George E.	126
	Farrow, Pattillo	110
	Gerlof, Robert	41
	Gregory, William E.	142

	Page		Page
Obituaries, Hagen, Carl L.....	154	President Washington and the early lighthouse work in this country.....	107
Haskins, Paul S.....	102	<i>President Wilson, S. S.</i> , hears radiobeacon great distance.....	16
Herbert, Fred.....	154	Presque Isle, Mich., history of Garraty family.....	224
Miles, Thomas J.....	208	Progress in electrification of lights in the approaches to Baltimore.....	5
Monteiro, John R.....	5	Promotions, Brush made first superintendent.....	169
Moore, Joseph H.....	158	Dillon made eleventh superintendent.....	160
Richardson, Charles.....	41	Edgcombe made nineteenth superintendent.....	8
Sherman, Carl E.....	156	Edgerton made thirteenth superintendent.....	57
Simmons, George W.....	10	Hopkins made fifth superintendent.....	12
Skinner, Charles C.....	126	King made Deputy Commissioner.....	213
Spicer, Linwood.....	50	King made Commissioner.....	213
Wilson, Henry E.....	53	Manyon made ninth superintendent.....	55
Wood, Thomas.....	10	on second district tenders.....	160
Offices, Bureau moves to Commerce building.....	103	Park made chief engineer.....	225
moved to Norfolk, Va.....	200	Park made Deputy Commissioner.....	8
new building at Charleston, S. C.....	201	Tinkham made seventeenth superintendent.....	225
new building at Portland, Maine.....	201	Tinkham made chief engineer.....	210
Old Cape Henry Lighthouse to be preserved for its historic interest.....	31	Thomas made examiner.....	176
Old Honolulu Harbor Light.....	196	Prompt replacement of missing lighted buoy.....	31
Old Point Comfort, Va., hailstorm.....	74	Public Health Service facilities, extended to retired employes.....	63
Olsen, John K., retirement.....	198	Public works allotments.....	66
On six of my own lighthouses.....	215	Publications (<i>see also</i> Light lists), new Great Lakes radiobeacon charts.....	60, 152
Operation of all Great Lakes radiobeacons on an hourly schedule.....	49	new light lists published.....	106
Orchard Point, Wash.....	16	new Pacific radiobeacon chart.....	74
<i>Orchid</i> , tender, converted to oil burner.....	122	new publications.....	55
recovers two sunken buoys.....	143	radiobeacon charts.....	88
Oregon lighthouse has large number of visitors.....	61	radiobeacon pamphlet issued.....	16
Organization of the Lighthouse Service.....	14, 42	Puget Sound, Wash., new light at Orchard Point.....	61
Origin of placing the red buoy on the right-hand side of channels.....	47	Punta Gorda light station experiences earthquake.....	92
Overfalls Lightship, heavy ice at.....	173	Putnam, George R., address.....	207
Pacific coast, buoy recovered in Hawaii.....	187	retirement of.....	119
distance finding test.....	225	Quick flashing lights, England.....	167
distance finding signals.....	84	mark turns in Delaware River.....	144
Panama, radiobeacons at.....	3	New York Harbor.....	74
Paris conference.....	63	Race Rock, N. Y., keepers rescue barge captain.....	66, 135
Park, C. A., appointed chief engineer.....	160	Radio, early history.....	88
appointed Deputy Commissioner.....	225	used for distress signals.....	9
Passage Island, Mich., gallant work in blizzard.....	143	Radio apparatus, development at Detroit.....	144
radiotelephone facilitates repair.....	134	Radio bearings, make possible another notable rescue in the Atlantic.....	27
Percentage of radio compass equipped vessels on the Great Lakes, increases.....	109	used in navigating the <i>Southern Cross</i> across the Atlantic.....	30
Perkins Island, Maine, keeper commended for rescue.....	82	Radio broadcasts, by Roscoe House.....	35
Permanent lighthouse at Nawiliwili, Hawaii, is now in service.....	146	by H. D. King.....	30
Personnel administration in the Lighthouse Service.....	211	by R. R. Tinkham.....	210
Personnel. <i>See also</i> Retirements, Deaths, Organization.....	171	from Buffalo lighthouse.....	223
Pharos of Alexandria, additional information discovered.....	110	from Farallon Islands, Calif.....	60
Photoelectric cell controls primary cell light.....	110	Radio compass, aids in locating ship in distress.....	104
Photronic cells found satisfactory in eighth lighthouse district.....	152	saves time in navigation.....	2
Pilots on St. Johns River, Fla., find green lights very satisfactory.....	150	used to locate vessels in dense fog.....	104
Pintsch gas buoys, conversion.....	101	used to locate a vessel in distress in the Florida Straits.....	136
Poe Reef, Mich., new lighthouse built.....	15, 19	Radio conferences, delegate.....	174
repairs to foundation.....	139	Radio direction finders, caution approaching lightships.....	217
Poems, lighthouse, the.....	196	effect of lightning on.....	20
<i>Poinciana</i> , tender, new type of rudder.....	30	follows course of hurricane.....	53
trial trip.....	28	lessen the risk of collision.....	60
Point Arena, Calif., radiobeacon heard at great distance.....	16	locates S. S. <i>Kronprins Gustaf Adolf</i>	104
<i>Point Breeze</i> , tug, keeper rescues crew.....	160	locates vessels in dense fog.....	195
Point Judith, R. I., to have radiobeacon.....	92	locates vessel in distress.....	109
Point Loma, Calif.....	76	maximum usefulness of.....	2
Point Lookout, Md., centennial improvements.....	17	percentage of lakes vessels having.....	87
new electrical equipment.....	174	saves time in navigation.....	13
Point No Point, Wash., lightning strikes station.....	24	small ships and.....	198
Point Reyes light station has the highest record for hours of fog.....	142	special use of.....	65
Point Ritidian, Guam, construction difficulties.....	152	used in locating S. S. <i>Usworth</i>	66
Port Eads, La., discontinuance of depot.....	226	without operators.....	54
Portland, Maine, construction of depot begins.....	56	Radio equipment, planned for liner's lifeboats on lightships 30 years ago.....	112
new office building.....	201	Radio ranges, Italy establishes.....	165
Portsmouth, Va., depot, new storehouse roof.....	21	Radio sets donated to keepers of isolated light-houses.....	170
<i>President Hooper, S. S.</i> , radio equipment for lifeboats.....	54	Radio signals to avoid collision, early suggestion.....	55
President Roosevelt commends crew of Diamond Shoal Lightship.....	163	Radiobeacon charts, comments on.....	66
		Great Lakes.....	106
		Pacific.....	23
		revised charts issued.....	

	Page		Page
Radiobeacons (<i>see also</i> Mobile Radiobeacons), approaching lightships.....	181	Retiremenes, Graves, Robert C.....	156
at Mount Desert Rock, Me.....	106	Gregg, Tom H.....	210
at Panama.....	37	Gunn, Amherst E.....	110
at Scotch Cap, Alaska.....	28	Johnson, John P.....	46
Atlantic coast stations synchronized.....	174	Luther, Oscar C.....	150
caution in approaching lightships.....	136	Miles, Thomas J.....	13
comments on.....	59	Norvell, Mrs. Maggie R.....	126
continuous wave equipment.....	108, 221	Olsen, John K.....	198
cooperation with Canada.....	221	Putnam, George R.....	207
coordinated operation.....	64	Sellman, Johan A.....	110
directional wireless.....	72	Sherman, E. L.....	121
effect on safety.....	55	Stebbins, Thomas P.....	50
established on the Irish coast.....	29, 109	Taylor, William J.....	226
favorable comments on.....	1	Warrack, Robert.....	8
guiding ships by radio.....	16	Wenzell, G. C.....	210
heard at an unusual distance in Pacific Ocean.....	49	Richardson, Capt. Charles, death.....	41
hourly operation on lakes.....	31	Riprap provides ample protection for break-water light station.....	125
Kilauea Point, Hawaii.....	89	Robbins Reef, N. Y.....	89
Lisbon conference on.....	172	Rock of Ages, Mich., radiotelephone used in emergency.....	155
Makapuu, Hawaii.....	195	Romer Shoal, N. Y., sinking of tender's cargo launch.....	223
maximum use.....	202	Rudders, new type.....	30
modern transmitters.....	67	St. George Reef, Calif., radiotelephone.....	108
navigation.....	60	St. Johns River, Fla., green lights.....	134
navigation of car ferries facilitated.....	13	pilots find green lights satisfactory.....	150
publications regarding.....	109	St. Marys River, Mich., new Detour Reef station.....	99
special uses.....	74	Sandy Hook lights temporarily extinguished.....	160
steamer <i>Bremen</i> hears 2,289 miles.....	92	Sankaty Head, Mass., visibility of light.....	158
tenth anniversary.....	142	Sault Ste. Marie, Mich., depot moved.....	180
to be established at Point Judith, R. I.....	91	Savannah River, waving girl.....	74
used in Alaska.....	46	Save small boy from drowning.....	76
use of to avoid collision.....	55	Saving of life and property.....	13,
west coast radiobeacons.....	112	17, 21, 25, 30, 34, 41, 46, 50, 54, 62, 66, 74, 77, 82,	85, 89, 94, 98, 140, 158, 160, 170, 172, 182, 188,
Radiobeacons as factors in insurance rates.....	119	214, 218, 223.	33
Radiobeacons, foreign, Ireland.....	121	Schuykill River, Pa., new light.....	37
Italy.....	155	Scotch Cap, Alaska, radiobeacon established.....	110
Japan.....	108	Sea lions perch on lighted whistle buoy in Alaska.....	160
Uruguay.....	104	Sellman, Johan A., retirement.....	152
Radiotelephone, at Detroit River light valuable in emergency.....	134	Service life of wrought iron rods at Fowey Rocks found to be over 60 years.....	160
at Rock of Ages light station of assistance in connection with a marine disaster.....	182	Seven Foot Knoll, Md., keeper rescues five men.....	222
at St. George Reef light station, Calif.....	53	Seventh district, effectively handles relief work and emergency repairs following recent hurricane.....	188
communication to isolated light stations on the Great Lakes, eleventh lighthouse district.....	109	replaces its last unattended kerosene light.....	227
facilitates emergency repair at isolated station.....	114	Seventy-fifth anniversary of Minots Ledge lighthouse.....	21
proves of value in emergency, Manitou Island, Mich.....	66	Seville exposition.....	156
valuable in emergency.....	181	Sherman, Carl E., death.....	121
Ragged Point, Md., mantle burner tested.....	141	Sherman, E. L., retirement.....	101
Raising and repair of the tender <i>Shrub</i>	11	Ship John Shoal, Del., improvements.....	6
Range lights, in Baltimore harbor.....	102	Shipbuilding (<i>see also</i> Lightships, and Tenders), coal barge built.....	61, 66
shown in the daytime.....	162	Shipwrecked crew take refuge on Nantucket Lightship.....	114
synchronized.....	139	<i>Shrub</i> , tender, raised.....	113
Redfield, former Secretary.....	141	raised and repaired.....	10
Relief work, during Columbia River ice jam.....	208	Side-wheel tenders.....	179
Remarkable recovery of a buoy.....	152	Simmons, Capt. George W., death.....	223
Remote-controlled fog signal.....	153	Sinking of Nantucket Lightship.....	68
Repair of wharves at Boston light station.....	144	Sinking of tender's cargo launch.....	156
Repairing worn shackles.....	102	Sixteenth district superintendent visits Washington.....	56
Repairs to foundation of Poe Reef light station.....	139	Skils needed to reach icebound light station.....	126
Reports on fog signals on the Great Lakes.....	208	Skinner, Charles C., death.....	87
Rescues, at Five Finger, Alaska.....	152	Small ships and radio compasses.....	131
at Perkins Island, Maine.....	110	Some notes on foreign lighthouses.....	81
at Seven Foot Knoll, Md.....	133	South Pass, La., waterspout damages electric line.....	197
at Stratford Shoal, Long Island Sound.....	91	Southern California islands, lighthouse reservations.....	27
at Whitefish Point, Mich.....	74	<i>Southern Cross</i> , radio bearings used in navigating.....	33
Eskimo rescued off Delaware.....	60	ing.....	33
Exeter City, S. S.....	95	Southwest Cape, V. I., new light.....	33
Great Duck Island keepers commended.....	1	Southwest Pass, La., improvements.....	182
guiding ships by radio.....	31	Special legislation affecting the Lighthouse Service.....	174
Iris assists burning yacht.....	83	Special type metal buoys withstand severe ice conditions in Long Island Sound.....	104
keeper rescues boys.....	91	Spectacle Reef, Mich., radiotelephone.....	103
keeper saves two boys.....	74	repairs to pier.....	143
life saving medal awarded.....	3	<i>Speedwell</i> , tender, recovers two sunken buoys.....	
of captain of stranded barge.....	60		
of S. S. <i>Kronprins Gustaf Adolf</i>	2		
of ship's crew under dangerous conditions.....	76		
radio compass used to locate vessel.....	125		
save small boy from drowning.....	154		
Resourcefulness of light keepers.....	157		
Retirements, Bennetts, Noah.....	12		
Bowerman, Horatio B.....	81		
Conway, John S.....	209		
Farrow, Pattillo.....			
Flood, Thomas.....			

	Page		Page
Spicer, Linwood, death.....	50	Tenders, <i>Sunflower</i>	64
Stannard Rock, Mich., ice storm.....	3	<i>Tulip</i>	223
Steamer <i>Bremen</i> hears radiobeacon 2,289 miles.....	109	<i>Violet</i>	38
Stebbins, Thomas P., retirement.....	50	<i>Wakerobin</i>	89, 126
Steel sheet caisson foundations for minor lights.....	189	<i>Wistaria</i>	150
Stepping Stones, N. Y., ice causes food shortage.....	172	Tending the light, Robbins Reef, N. Y.....	89
Stevenson, D. Alan, visits Washington.....	137	Tenth anniversary of beginning of radiobeacon system.....	74
Storm at Tillamook Rock light station, Oreg.....	113	Test, of new whistle valve on buoys shows good results.....	24
Storm damage, Atlantic coast, August 1933.....	159	of two-tone diaphone is made.....	81
Cape Lookout, N. C.....	41	of electric lighted buoys for special requirements.....	209
eighteenth district.....	114	Thomas, Alfred H., appointment of.....	210
fifth district.....	162	Tides, shortage of at Key West.....	176
on Pacific coast.....	169	<i>Tiger</i> , S. S., hurricane followed by radio compass.....	20
seventeenth district.....	113, 192	Tillamook Rock, Oreg., difficult landing of repair material.....	204
Storms, blizzard at Passage Island.....	143	repairs completed.....	199
Cape Lookout in hurricane.....	40	storm at.....	113
Diamond Shoal in hurricane.....	40	tremendous seas sweep.....	191
Diamond Shoal Lightship undamaged.....	142	Tinkham, R. R., addresses Japanese training ship students.....	84
dust storm at Aransas Pass.....	208	appointed chief engineer.....	225
dust storm in Oregon and Washington.....	74	made superintendent of seventeenth district.....	8
hall storm at Old Point Comfort.....	74	president of Federal business associations.....	158
ice storm in Lake Superior.....	3	Transfer of the airways division.....	155
Louisiana lighthouse damaged.....	81	Transfers and promotions (see also Promotions).....	214
March 1931 storm in second district.....	69	Transport garden 27 miles to sea.....	188
November 1935 storm damage.....	227	Transporting power of drifting ice.....	176
repairs at Boston light station.....	102	Treasury life saving medal awarded for saving a woman from drowning.....	91
<i>Sunflower</i> in.....	64	Trial trip of new lighthouse tender <i>Violet</i>	38
Swiftsure Lightship in storm.....	64	Trial trips of new tender <i>Poinciana</i>	28
Umatilla Lightship off station.....	143	<i>Tulip</i> , tender, sinking of cargo launch.....	223
York Spit Lighthouse damaged.....	159	Turn Point, Wash., unusual illuminating apparatus.....	6
Stormy trip of a lighthouse tender on the Pacific coast.....	3	Twelfth conference of superintendents of lighthouses.....	200
Straits of Florida, number of vessels using.....	77	Twenty years' progress of the Lighthouse Service of the Department of Commerce.....	39
numerical system of lights.....	72	Twin lights, Cape Ann discontinued.....	118
unusual visibility of lights.....	125	Two of new Diesel lightships on station, others are nearing completion.....	29
Strandings, statistics for Atlantic coast.....	23	Two-tone diaphones, test.....	81
statistics for Great Lakes.....	72	Umatilla Reef Lightship, driven off station.....	143
Stratford Shoal, N. Y., rescue by keepers.....	146	Uniform method of marking intracoastal waterway.....	213
Submarine cable, cable laying by Lighthouse Service.....	164	Unusual arrangement of illuminating apparatus at Turn Point light station.....	6
laid in twelfth district.....	189	Unusual ice jam in the Columbia River: relief work of Government vessels.....	11
Long Beach Breakwater Light.....	97	Unusual visibility, of Florida Reef lights reported.....	174
Suggested arrangement of flashing lights.....	131	of lights at Cape Ann, Mass.....	125
<i>Sumac</i> , tender, recovers concrete caissons.....	46	of lights off Georgia coast.....	170
recovers lightship moorings.....	53, 121	of lights on Lake Michigan.....	182
<i>Sunflower</i> , tender, in Gulf storm.....	64	at Dry Tortugas Light, Fla.....	226
Superintendents address local organizations.....	57	Unusually mild weather prevails along North Atlantic coast and on Great Lakes.....	56
Superintendents, chances, fourth and ninth districts.....	192	Uruguay establishing three radiobeacons.....	111
Manyon made ninth superintendent.....	8	Use of green lights on buoys and other aids.....	111
Seventeenth and nineteenth districts.....	8	Use of jack bits for drilling large holes in concrete and rock.....	187
Superintendent's conference, eleventh.....	108	Use of mobile radiobeacon in winter navigation on Lake Michigan.....	145
twelfth.....	200	Use of mobile radiobeacon to avoid collision.....	111
Swiftsure Bank Lightship, severe storm.....	64	Use of odd and even numbers of flashes in lateral buoyage.....	119
takes station.....	29	Use of radio signals to avoid collision.....	91
Synchronization, Atlantic coast.....	28	<i>Usworth</i> , S. S., located with direction finder.....	198
of air fog signals and radiobeacon signals for distance finding.....	51	Valuable buoys sunk by collision and promptly recovered.....	10
of range lights.....	181	Value of cooperation with private agencies pointed out.....	45
System of flashing lights for buoys.....	203	Venezuela establishes new aids to navigation.....	21
Tablet placed on Browns Point Lighthouse, Wash.....	188	Vessel masters cooperating in avoidance of collisions with lightships.....	197
Taylor, William J., retirement.....	226	Vessel strandings and radio bearings from the ship.....	23
Tenders, <i>Acacia</i>	137, 171	Vessels (see also Lightships; Tenders), coal barge built.....	6
<i>Amaranth</i>	46, 88, 154	Vessels dangerously off course in vicinity of light stations or lightships—warning signals.....	192
<i>Arbutus</i>	149		
<i>Aster</i>	214		
<i>Cherry</i>	56, 139		
<i>Columbine</i>	56, 80		
<i>Cypress</i>	160, 163, 165		
<i>Greenbrier</i>	156		
<i>Hibiscus</i>	187		
<i>Holly</i>	113		
<i>Iris</i>	31		
<i>Ivy</i>	200		
<i>Jasmine</i>	211		
<i>Lilac</i>	154		
<i>Linden</i>	41, 65, 80, 102		
<i>Manzanita</i>	3		
<i>Marigold</i>	91		
<i>Mayflower</i>	76		
<i>Myrtle</i>	92		
<i>Orchid</i>	122, 143		
<i>Poinciana</i>	28, 30		
<i>Shrub</i>	91, 114		
<i>Speedwell</i>	143		
<i>Sumac</i>	46, 53, 121		

	Page		Page
Violent storm on the North Pacific coast drives Umatilla Lightship from station.....	143	Waving girl of the Savannah River.....	74
<i>Violet</i> , tender, trial trip.....	38	Weather and radio.....	96
Virgin Islands, new light at Southwest Cape.....	33	Wenzel, G. C., retirement.....	210
Visibility, <i>Amaranth</i> sights strange beam.....	46	Whistle valve for buoys.....	24
light seen at unusual distances.....	142	Whitefish Point, Mich., distance finding.....	27
lighthouses observed from Mt. Washington.....	150	notable rescue.....	153
mirage of lighthouse.....	134	Wild duck breaks glass at North Head Lighthouse.....	126
of Sankaty Head, Mass.....	158	Wilson, Henry E., death.....	53
off Florida Reefs.....	174	Wind driven generators, Kalea, Hawaii.....	6
off Georgia coast.....	170	Point Lookout, Md., new structure.....	17
on Lake Michigan.....	182	structure completed.....	194
unusual at Dry Tortugas.....	226	Wireless communication, early history.....	66
unusual visibility of lights.....	125	history.....	135
Visit to American lighthouses by lighthouse engineer from Scotland.....	139	<i>Wistaria</i> , tender.....	150
Visitors, Absecon, N. J.....	92, 142	Wood, Thomas, death.....	10
Cape Cod, Mass.....	10	Woods Hole, Mass., increase wharf area at depot.....	101
Gay Head, Mass.....	10	Work of Lighthouse Service on Great Lakes.....	206
Yaquina Head, Oreg.....	61, 110	Work of the Lighthouse Service during the past year, annual report summary.....	48
Visitors to lighthouse exhibit at a Century of Progress.....	158	Work of the Lighthouse Service during the past year, annual report.....	95
Volcanos, nature's lighthouse.....	176	Wrecking, numerical system for reef lights.....	72
<i>Wakerobin</i> , tender, assists ferry.....	89	Wrecks (see also Strandings), along the Florida reefs.....	138
new communication system.....	126	and radio bearings.....	23
Warning radiobeacons, as guard against collision.....	127	buoy placed to mark <i>Akron</i>	151
description.....	205	marking.....	7
Warning signals, for ships dangerously off course.....	192	Wrought iron, galvanized, for minor lights.....	167, 193
Warrack, Robert, retirement.....	8	service life.....	152
Warrior Rock, Oreg., keeper walks ashore over ice.....	11	Yaquina Head, Oreg., number of visitors.....	61, 110
<i>Washington</i> , S. S., collides with Nantucket Lightship.....	169	Yerba Buena (Goat Island), Calif., new depot buildings.....	55
Water penetration through brick and mortar.....	68	York Spit, Va., storm damage.....	159
Waterspout damages electric line.....	81		

DEPARTMENT OF COMMERCE
BUREAU OF LIGHTHOUSES

INDEX TO LIGHTHOUSE SERVICE BULLETIN, VOLUME V

(1936-39)

	Page		Page
Accidents:		Boston Lighthouse, Mass.:	
causes.....	175	brief notes on.....	41
need for avoidance.....	64	history of.....	155
prevention of.....	138	oldest in United States.....	59
Accounting, methods improved.....	32	Boston Lightship, damaged by collision.....	1
Act for establishment of Lighthouse Service.....	150	Bowerman, Horatio B., death of.....	114
Adams, Capt. Roy H., death of.....	84	Braithwaite, Capt. George, death of.....	56
Addresses:		Brant Point Lighthouse, Mass., history of.....	161
before Lake Carriers' classes.....	12	Bulletin, Lighthouse Service, twenty-fifth anniversary of.....	45
by Secretary of Commerce at superintendents' conference.....	133	Buoyage.....	187
Aids to navigation:		Buoy boats.....	27
at Barranquilla, Colombia.....	173	Buoy radiobeacon tests.....	165
growth of system in United States.....	181	Buoys, drifting:	
Airplane, keeper helps locate.....	21	keeper locates.....	71
Alaska:		Monroe, Mich., buoy.....	72
Cape Spencer Lighthouse.....	136	on Florida coast.....	63
cooperation with Weather Bureau in.....	190	recovered by <i>Toy</i>	21
<i>Alder</i> , tender, crew assigned.....	182	Torch Lake buoy.....	71
Alexander, A. B., oldest employee.....	128	Buoys:	
<i>Almy</i> , Capt. H., retirement of.....	76	battery trumpet horn.....	190
<i>Amaranth</i> , tender, assists National Park Service.....	51	early relief of.....	28
Amber light for fog warning.....	40	first electric lighted.....	147
American Merchant Marine Library Association:		radiobeacon.....	165, 190
receives unusual request.....	72	Cabrillo National Monument (Point Loma Light), Calif.....	3
report of work of.....	119	California, gale strikes.....	105
value of work of.....	24	Candles in the Lighthouse Service.....	106
Anniversaries:		Cape Cod Lighthouse, Mass., long-range radiobeacon inaugurated.....	29
one hundred fiftieth of Lighthouse Service.....	149, 177	Cape Flattery Lighthouse, Wash., unusual visibility of.....	44
one hundredth of Grace Darling's rescue.....	129	Cape Henry Lighthouse, Va.:	
President signs resolution on.....	184	contract for construction of.....	151
twenty-fifth of Bulletin.....	45	first lighthouse built by federal government.....	150
Antennas, radiobeacon.....	115	Cape May Lighthouse, N. J., electric auxiliary lens drive.....	28
Appointments. <i>See</i> Promotions.		Cape Meares Lighthouse, Oreg., keepers assist fisherman.....	60
Appropriations.....	21, 25, 71, 112	Cape Spencer Lighthouse, Alaska, distance-finding signals used.....	136
Appropriations Committee commends administration of Lighthouse Service.....	185	Career service.....	67
Army, United States, officers formerly detailed to lighthouse work.....	163	Caribbean Sea lights.....	102
Assistant Secretary visits eleventh and twelfth districts.....	157	Carrier pigeons, supplement communication system.....	104
Assistant superintendents appointed in seventh and eighth districts.....	16	Central America, coordination of radiobeacons.....	141
Automatic lights:		Channel reports, Mississippi River.....	75
forerunner of.....	137	Charleston, S. C.:	
improvement of, in Hawaii.....	50	protest by pilots a century ago.....	138
work of Dalen.....	107	tornado.....	137
Automatic sound-actuated fog-signal control equipment.....	189	Chesapeake Lightship:	
Baltimore, Md., radio laboratory moved to.....	164	daytime display of light.....	18
Bandon, Oreg., fire.....	39	in hurricane.....	35
Barranquilla, Colombia, navigational aids at.....	173	Classes, for keepers.....	10
Beacon boats.....	121	Closing of navigation on Great Lakes.....	49
Beavertail Lighthouse, R. I., history of.....	169	Coast Guard:	
Bell boats.....	121	comments on distance finding.....	136
Bids, for new lighthouse tenders.....	126	Lighthouse Service consolidated with.....	183
Black, George W., death of.....	104	Collisions:	
Black Rock Lighthouse, Conn., early history of.....	113	Boston Lightship in.....	1
Block Island Lighthouse, R. I., unusual range of fog signal.....	106	prevention of.....	173
Bonneville Dam, traffic inaugurated through.....	127	radiobeacons means of preventing.....	75
Books:		with lightships.....	96
for oilers and wheelmen.....	132	Colombia, aids to navigation at Barranquilla.....	173
relieve monotony of isolation.....	24	Columbia River, traffic through Bonneville Dam.....	127
supplied by Library Association.....	119	Commendation of Lighthouse Service administration by Appropriations Committee.....	185
unusual request for.....	72		

	Page		Page
Commerce Department, informal gatherings of field officers	106	Earthquakes:	
Communication system of Florida coast supplemented by carrier pigeons	104	at Point Borinquen, P. R.	60
Compass error, determining by direction finder	13	damages Puerto Rican light structure	91
Conference of superintendents, Secretary of Commerce addresses	133	Hawaiian	105
Connecticut River, flood damage	13	near New York	79
Consolidation of Lighthouse Service with Coast Guard	177	Eighteenth district, review of progress	45
Construction work by contract	96	Eighth district, review of progress	93
Contracts and specifications for Cape Henry lighthouse	151	Electric auxiliary lens drive	28
Cooperation:		Electric fog-bell strikers	189
by mariners	48	Electric-lighted buoys, first	147
in flood relief	60	Eleventh district:	
in promoting safe operation of yachts	131	instruction of keepers	11
tender <i>Amaranth</i> assists National Park Service	51	review of progress	89
with boating activities	144	review of progress	22
with United States power squadrons	105	Emergencies, meeting	35
with Weather Bureau	27, 51	Engineer in Government service	21
with Weather Bureau and Civil Aeronautics Authority in Alaska	190	Engineer, responsibility of in preparation of specifications	95
Coordination of radiobeacon system in Central American waters	141	Errors of radiobeacon bearings	64
Cornfield Point Lightship, Conn.:		Every three seconds (extract from <i>Ships' Bulletin</i>)	136
in storm	5, 9	Exhibits, Merchant Marine Conference, Baltimore, Md.	123
new ship launched	118	Fathometer, shallow water, successful on tenders	118
new ship delivered	130	Fifteenth district:	
new ship placed on station	180	inspection of	73
Cuba, buoy recovered by <i>Ivy</i>	21	review of progress	9
<i>Cypress</i> , tender, uses radiobeacon bearings	50	Fifth district:	
Daboll fog signals	170	ice damage	69
<i>Dahlia</i> , tender, assists motorboat	123	review of progress	145
Darling, Grace	129	Secretary of Commerce visits	119
Daymarks, improvement of natural marks	79	Fire, caution regarding	151
Daytime exhibition of lights	18	First contract for construction of a lighthouse by Federal Government	33
Deaths. (See <i>Obituaries</i> .)		First district, review of progress	155
Delaware Bay and River:		First lighthouse:	
first range lights	109	erected in United States	150
historical notes on	61	to be built by Federal Government	158
Depots:		Fixed or floating aids	43
hurricane damage at Bristol, R. I., Woods Hole, Mass., and New London, Conn.	136	Flashing lights, use of quick	158
instruction of keepers at Sault Ste. Marie and Detroit, Mich.	11	Floating or fixed aids	13
radiophone station at Sault Ste. Marie, Mich.	125	Floods:	
school children visit Staten Island	115	Hudson River	13
Detroit, Mich., radio laboratory moved	164	Ohio River	13
Diamond Shoals Lightship, N. C., history of in hurricane	35	relief work	60
poem on	107	Florida Reef lighthouses	85
Dillon, F. P., addresses Lake Carriers' meeting	12	Flynn's Knoll, proposed light	114
Distance-finding (see also <i>Synchronized Signals</i>):		Fog:	
advantages and extension of	15	at Humboldt Bay Station	44
Coast Guard cutter comments on	136	unusual on Maine coast	126
cooperation by mariners	48	Fog-bell strikers, electric	189
experience of British steamer	30	Fog lights, at Fort Gratiot Lighthouse, Mich.	40
favorable experience with	91	Fog signals:	
favorable report from battleship	18	automatic sound-actuated	189
foreign view of	40	battery trumpet horn	190
observations	31	electric fog-bell strikers	189
observations by S. S. F. H. Hillman	17	interesting observations	145
on Great Lakes	23	lightbeam control	55
signals appreciated	91	observations	175
special operation of	47	testing ground, Beavertail	170
use of in obtaining point of departure	60	unusual range of Block Island	106
value of on Pacific coast	4	unusual range on Nantucket Lightship	25
Distance-finding visual indicator	174	Forrest, Joseph, inventor of automatic lighting apparatus	137
District limits:		Fort Gratiot Lighthouse, Mich., special fog light	40
change of sixth and seventh	49	light	61
change of eighth and fifteenth	166	Fourth district, review of progress	166
Dog, lighthouse "Watch"	51	Fowler, Thomas P., universal pitchometer	56
Dorry, Capt. B. B., death of	84	Frizzell, Capt. James B., death of	107
Eagle Harbor Lighthouse, Mich., withstands severe ice conditions	152	Frying Pan Shoals Lightship, N. C., supplies weather reports	51
Early lighthouses:		Gardner, Watts D., death of	8
built before 1789	152	Gedney Channel, N. Y., first electric-lighted buoys	147
proposals for	113	Gillette, E. C., retirement of	75
Early marking of New York Harbor	114	<i>Goldenrod</i> , new tender for fifteenth district	83
Early notice to mariners	106	Good, Capt. Thomas B., death of	87
		Graveyard of the Atlantic Ocean	107
		Grays Reef, Mich., new light station	30
		Great Lakes:	
		closing of navigation on	49
		distance finding	23
		modern stations withstand severe ice conditions	111
		tions	23
		radiotelephone broadcasts	125
		safety on	174
		use of distance finding in obtaining point of departure	60

	Page	King, H. D., articles by—Continued.	Page
Green Bay Harbor Entrance, Wis., new light station	30	happy medium	14
<i>Greenbrier</i> , tender, performs relief work on Ohio River	13	in-service training	51, 127
Growth of the system of aids to navigation	181	in union there is strength	183
Guanica, P. R., earthquake damage	91	mutual confidence and respect in a career service	67
Hankinson, R. L., made chief of Architectural and Structural Division	18	prove all things	131
Hawaii:		they also serve who only stand and wait	36
earthquake damage	105	tribute and a challenge	177
improvement of unwatched lights	50	woods and the trees	157
radiobeacons	111	Laau Point Light, Molokai, Hawaii, improved	50
Hillsboro Inlet Lighthouse, Fla., storm strikes	4	Lake Carriers' Association:	
Historical articles:		books for oilers and wheelmen	132
Beavertail Lighthouse	169	classes study navigational aids	12
Boston Lighthouse	155	prevention of accidents	138
Brant Point Lighthouse	161	safety on the Great Lakes	174
Cape Henry Lighthouse	150	Lake Erie, buoy adrift in ice	72
New London Lighthouse	178	Lake Huron, special fog light	40
Sandy Hook Lighthouse	184	Lake Michigan, new light stations	30
Hitchens, G. W., appointed fourth superintendent	49	Lake Superior:	
Holland Island Bar Lighthouse, Md., model of	119	buoy missing	71
<i>Hollyhock</i> , tender, fathometer used on	123	improvement of natural landmarks	79
Hopkins, L. M., retirement of	48	unusual visibility of lights	25
Horn, battery trumpet	190	visitors at Split Rock lighthouse	104
House, Roscoe, addresses Lake Carriers' meeting	12	Lanphier, E. S., retirement of	115
Hubbard, Charles H.:		<i>Larkspur</i> , tender, placed in commission	181
retirement of	8	Lens drive, electric, at Cape May	28
death of	36	Life-saving medal awarded Thomas J. Steinhise	8
Hudson River, flood damage	13	Lightbeam control of fog signals	55
Humboldt Bay, Calif., fog	44	Light boats	121
Hurricanes:		Light characteristics, quick flashing lights	43
California coast	105	Lighthouse Board, Army and Navy officers detailed to	163
damage in southern districts	27	Lighthouse Service:	
Lighthouse Service and lightships in	141	act for establishment	150
New England, devotion to duty of keeper	133	and the hurricane	141
New England, loss of life and extensive property damage	135	articles on in <i>Ship's Bulletin</i>	123
New England, violence of	145	commendation of administration	185
<i>Hyacinth</i> , tender, water purification	7	comments on	178
Hydrographic Review, articles in	12	development of	153
Ice damage:		exhibit at Merchant Marine Conference	136
Great Lakes lighthouses withstand	111	many employees spend lifetime in	63
North Atlantic coast	9	one hundred fiftieth anniversary	149, 177
Improvement of natural landmarks	79	personnel administration	117
Increase in radiobeacons of the world	59, 103, 156	President signs resolution on anniversary	184
Informal gatherings of Department field officers	106	talks on	63
Ingalls, Herman M., appointed superintendent, first district	83	Lighthouse "Watch" dog	51
Inspections:		Lighthouses:	
Assistant Secretary visits eleventh and twelfth districts	157	in use in 1789	152
Fifteenth district	118	early history of	153
unusual experiences at light station	67	history of Boston Light, Mass.	155
Instruction:		history of Brant Point, Mass.	161
in making reports	50	history of Beavertail, R. I.	169
of keepers	10	history of New London, Conn.	178
Insurance premiums:		history of Sandy Hook, N. J.	184
direction finders affect	71	Light lists:	
reduced by radio direction-finding equipment	24	and the small boat operator	103
Intracoastal Waterway:		new editions	79
Eighth district	94	required aboard vessels	99
Sixth district	79	Lightning, protection against	116
winter conditions	4	Lightships:	
<i>Jay</i> , tender, recovers Cuban buoy	21	Boston	1
Joost, Albert, dies of burns	3	Chesapeake	35
Kaena Point, Hawaii, light improved	50	collisions with	96
Keeper assists injured fisherman	30	Cornfield Point	5, 9, 118, 130, 180
Keeper dies as result of burns	60	Diamond Shoals	35
Keepers:		Frying Pan Shoals	51
assistant, training of	50	Nantucket	5, 40, 187
Eleventh district, instruction in modern lighthouse practice	11	Pollock Rip	166
help in locating lost airplane	21	Saint Johns River	51
successful in locating missing lighted buoy	71	San Francisco	142
Kilauea radiobeacon, long distance bearings	111	Savannah	51
King, H. D., articles by:		Stone Horse Shoal	9
authority and responsibility	92	Swiftsure Bank	43
disciplines	120	Umatilla Reef	157
		Winter Quarter Shoal	35
		<i>Lilac</i> , tender, damaged by ice	9
		<i>Linden</i> , tender, use of radiophone	157
		Lloyd Harbor Lighthouse, N. Y., earthquake	79
		Long distance bearings on radiobeacons	111
		Long-range radiobeacon inaugurated at Cape Cod	29
		Makapuu radiobeacon, long distance bearings	111
		Manyon, Norman C., appointed Fifth Superintendent	49

	Page	Organization of the Lighthouse Service:	Page
Maple, tender:			
launched	180	in 1937	76
design of	186	in 1939	191
Marblehead Lighthouse, Ohio, visitors	173	"Our Men"	100
Marine information broadcast by radiotelephone	125	Palmer Island Lighthouse, Mass., hurricane damage	133, 135
Marquette Lighthouse, Mich., withstands severe ice conditions	111	Palmetto, tender, value of radiotelephone	71
Merchant Marine Conference, Lighthouse Service exhibit	136	Personnel administration	117
Merrill, E. C.:		Peshtigo Reef, Wis., new station	30
made superintendent seventeenth district	12	Pigeons, carrier, supplement communication system of Florida coast	104
made superintendent eighth district	115	Pitchometer patented	166
Miller, Chas., assists injured fisherman	60	Point Borinquen Lighthouse, P. R., earthquake	60
Minneapolis Shoal, Wis., new station	30	Point Loma Lighthouse, Calif., preserved as national monument	3
Minots Ledge Lighthouse, Mass., poem on	123	Pollock Rip Lightship, Mass.:	
Mississippi River, flood relief work	60	assists damaged plane	3
Mobile radiobeacons, and collision prevention	172	in January storm	166
Model of Holland Island Bar Light Station	119	Poppy, tender, use of radiotelephone communication	100
Modern lighthouse structures successfully withstand severe ice conditions on Great Lakes	111	Power squadrons, United States, cooperation with	105, 131
Modern navigational instruments, value recognized by United States Court	50	Progress in marine radio	178
Monitoring Lighthouse Service radio aids	10	Progress of Lighthouse Service, review of:	
Montauk Point Lighthouse, N. Y.:		First district	33
interesting observations of fog signal	145	Second district	41
visitors at lighthouse	173	Third district	53
Muth, Frank A., death of	7	Fourth district	61
		Fifth district	69
Nantucket Lightship, Mass.:		Sixth district	77
awarded cup	187	Seventh district	85
in storm	5	Eighth district	93
memorial tablet	40	Ninth district	101
radiobeacon appreciated	91	Tenth district	97
unusual range of fog signal	25	Eleventh district	89
unusual visibility of	22	Twelfth district	81
Narcissus, tender:		Fifteenth district	73
launched	157	Sixteenth district	65
design of	186	Seventeenth district	57
Natural landmark, improvement of	79	Eighteenth district	45
Nautical Magazine:		Nineteenth district	37
article on radio bearings	39	Promotions:	
article on synchronous signaling	40	Ganong made assistant superintendent seventeenth	16
fog signal observations	175	Hankinson appointed chief Architectural and Structural Division	18
Navassa Island	101	Hitchens made fourth superintendent	49
Navesink Lighthouse, N. J., historical notes on	54	Ingalls appointed first superintendent	83
Navy, United States:		Manyon made fifth superintendent	49
used distance finding signals	4	Merrill made eighth superintendent	115
favorable report on distance finding	18	Merrill made seventeenth superintendent	12
officers formerly detailed to lighthouse work	163	Salzer, H. S., succeeds Ziblich	16
New lighthouse tenders, bids for	126	Skinner, G. B., made twelfth superintendent	12
New London Harbor Lighthouse, Conn., history of	178	Ziblich made assistant superintendent	16
New York Harbor, early marking of	114	eighth	16
Night navigation in small boats	129	Proposals for building early lighthouses	113
Nineteenth district, review of progress in	37	Protest by Charleston pilots of a century ago	138
Ninth district, review of progress in	101	Prudence Island Lighthouse, R. I., hurricane damage	135
North Manitou Shoal, Mich., new station	30	Public Works Administration funds allotted Lighthouse Service	122
Notice to Mariners:		Putnam, G. R.:	
an early	106	article in Hydrographic Review by	12
of much assistance	51	article in National Geographic Magazine by	31
radiotelephone broadcasts	125	new book by	67
Obituaries:		Queen Mary, S. S., appreciates radiobeacon system	91
Adams, Capt. Roy H.	84	Quick flashing light, use of	43
Black, George W.	104	Race Rock Lighthouse, N. Y., ice and storm damage	5
Bowerman, Horatio B.	114	Radio:	
Braithwaite, Capt. George	56	and safety at sea	113
Dorry, Capt. B. B.	84	application to lighthouse work	186
Frizzell, Capt. James B.	84	developments	120
Gardner, Watts D.	8	early use of	142
Good, Capt. Thomas B.	87	monitoring	10
Hubbard, Charles H.	36	progress in marine	178
Joost, Albert	3	Radiobeacon buoy:	
Muth, Frank A.	7	Lighthouse Service tests on	165
Ohio River:		report on	190
flood damage	13	Radiobeacons:	
flood relief work	60	Antennas for	115
Old Point Comfort Lighthouse, Va., lightbeam control of fog signals at	56	as a means of collision prevention	75, 172
Oldest employee of Lighthouse Service	128	Atlantic Coast	88
Oldest employee with more than 45 years' service	63		
Oldest lighthouse in United States	58		
One hundred and fiftieth anniversary of Lighthouse Service	149		
joint resolution on	177		
President signs resolution	184		

	Page	Ships' Bulletin, series of articles on Lighthouse Service in	Page
Radiobeacons—Continued.		Shubrick, tender, first on Pacific Coast	23, 57
coordination in Central American waters	141	Sixteenth district, review of progress	65
developments	19	Sixth district:	
errors of bearings	95	change of limits of	49
for whales	166	reflector button units in	55
long distance bearings on	111	review of progress in	77
long-range at Cape Cod	29	Skinner, Guy B., made superintendent	12
mobile	172	Small, Arthur A., in New England hurricane	133
monitoring	10	Small boats:	
tender <i>Cypress</i> makes effective use of	50	cooperation with boating activities	144
transatlantic liner appreciates	91	light lists used aboard	103
world statistics	59, 103, 156	night navigation in	129
Radio bearings in navigation	39	radio direction finders for	67, 87
Radio developments, Lighthouse Service. 1, 5, 19, 120		radiophone communication for	99
Radio direction finders,		safe operation of	131
determination of compass error by	13	Southampton Shoal Lighthouse, Calif., death of keeper	3
developments	5	Specifications:	
factor in insurance rates	71	legal aspects of	130
for small boats	67	responsibility in preparing	21
reduces insurance premiums	24	Spectacle Reef Lighthouse, Mich., radiotelephone reduces hazard of employment	59
trends	98	Split Rock Lighthouse, Minn., visitors	104, 173
use of on small craft	87	Standardization or standards	111
Radio laboratory moved to Baltimore	164	Standards, National Bureau of, lighting protection	116
Radiotelephones,		Staten Island Depot, N. Y.:	
at Tillamook Rock	21	early history of	54
broadcasting of marine information	125	school children visit	115
developments	1	Statistics:	
facilitate administration	71	buoyage	187
for small vessels	99	fixed and floating aids	158
on <i>Linden</i> used in assisting stranded vessel	157	increases in navigational aids	181
reduces hazard of employment	59	radiobeacons of world	59, 103, 156
Range lights	109	safety at sea	48
Reflector buttons used in sixth and seventh districts	55	visitors at lighthouses	173
Register, United States, for year 1794	153	Steinhise, Thomas J., awarded silver life-saving medal	8
Relief funds allotted Lighthouse Service	122	Stone Horse Shoal Lightship, Mass., in storm	9
Relief of buoys in first lighthouse district	28	Storms (see also Ice Damage):	
Reorganization, consolidation with United States Coast Guard	183	damage in New England	5, 9
Rescues:		damage Umatilla Reef Lightship	157
Lightship crew assists damaged plane	3	gale strikes California	105
tender <i>Rose</i> at Bandon, Oreg., fire	39	Hillsboro Inlet Lighthouse in November storm	4
Retirements:		hurricane damage in southern districts	27
Almy, Capt. H. C.	76	Intracoastal Waterway, severe weather conditions	4
Gillette, E. C.	75	lighthouses in hurricane	35
Hopkins, Lewis M.	48	New England coast, 1938	135
Hubbard, Capt. Charles H.	8	Pollock Rip Lightship rides out	166
Lanpher, E. S.	115	Richardson Rock Light destroyed	166
Richardson Rock Light, Calif., destroyed in storm	166	South Carolina aids not damaged by	137
Romer Shoal Lighthouse, N. Y., earthquake	79	Swiftsure Bank Lightship in gale	43
<i>Rose</i> , tender:		Third district flood damage	13
lengthening of	44	Studios seaman	72
shelters refugees at Bandon, Oreg., fire	39	<i>Sumac</i> , tender, water purification	7
Safety at sea:		Superintendents:	
radio and	113	conference of	133
United States making gains in	48	eighth district	115
Safety on the Great Lakes	174	fourth and fifth districts	49
Saint Augustine Inlet Lighted Buoy 2, wandering but upright	63	Ingalls appointed first district	83
Sandy Hook Lighthouse, N. J.:		twelfth and seventeenth districts	12
history of	184	Surplus property, disposal of	130
oldest lighthouse structure	59	Swiftsure Bank Lightship, Wash., in gale	43
San Francisco Lightship, early use of wireless	142	Synchronized signals (see also Distance-finding signals):	
Sankaty Head Lighthouse, Mass., unusual visibility	22	advantages and extension of	15
Sault Ste. Marie Depot, Mich., radiophone station	125	favorable report from United States Navy battleship	18
Savannah, City of, honors "waving girl"	143	foreign view of	40
Saving of life and property	4, 12, 22, 25, 28, 32, 36, 44, 64, 72, 80, 91, 104, 123, 138, 144	observations by S. S. F. H. Hillman	17
Saybrook Breakwater Lighthouse, Conn., violence of hurricane	145	on Great Lakes	23
School children visit General Lighthouse Depot	115	special operation of distance-finding signals	47
Seaworthiness (article in Motor Boating)	98	value of on Pacific Coast	4
Second district, review of progress in	41	Talks on Lighthouse Service	63
Secretary of Commerce:		Tate, Capt. W. J.:	
addresses conference of lighthouse superintendents	133	attends Wright celebration	115
visits fifth lighthouse district	145	honored	104
Seven Foot Knoll Lighthouse, Md., keeper awarded medal	8	Tenders, lighthouse:	
Seventeenth district, review of progress	57	Alder	182
Seventh district:		Amaranth	51
change of limits	49	Cypress	50
reflector button units	55	Eln	126
review of progress in	85	Goldenrod	83, 126

	Page		Page
Tenders, lighthouse—Continued.			
<i>Greenbrier</i>	13	United States power squadrons, cooperation	
<i>Hollyhock</i>	123, 126	with.....	105, 131
<i>Hyacinth</i>	7	Universal pitchometer patented.....	166
<i>Ilex</i>	123		
<i>Ivy</i>	21	Value of modern navigational instruments	
<i>Jasmine</i>	126	recognized by United States court.....	50
<i>Larkspur</i>	181	Veteran Steamboatmen's Association:	
<i>Lilac</i>	10, 126	annual reunion.....	23
<i>Linden</i>	157	at Bonneville.....	20
<i>Maple</i>	180, 186	<i>Violet</i> , tender, aids vessel in Chesapeake Bay.....	4
<i>Marigold</i>	59	Visibility, unusual:	
<i>Narcissus</i>	157, 186	at Block Island and Cape Flattery.....	44
<i>Poppy</i>	100	at Nantucket and Sankaty Head.....	22
<i>Rhododendron</i>	127	on Lake Superior.....	25
<i>Rose</i>	39, 44	Visitors:	
<i>Shubrick</i>	23	at Split Rock Lighthouse.....	104
<i>Sumac</i>	7	school children at depot.....	115
<i>Tulip</i>	136	statistics.....	173
<i>Violet</i>	4, 10	Visual indicator, distance finding.....	174
<i>Zinnia</i>	157, 186		
bids for new.....	126	Water purification on the Great Lakes.....	7
new ships being built.....	186	"Waving girl of Savannah River" honored....	143
Tenth district, review of progress in.....	97	Weather Bureau:	
Third district:		cooperation with.....	27, 190
flood damage.....	13	lightships report weather to.....	51
review of progress in.....	53	Whale Rock Lighthouse, Mass.:	
Tillamook Rock Lighthouse, Oreg.:		destroyed in hurricane.....	135
one of most famous.....	58	inspection of remains of.....	146
radiotelephone.....	21	Whales, radiobeacons for.....	166
unusual experience in inspection of.....	67	"What would you do?".....	22
Torch Lake Lighted Buoy 1, recovery of.....	71	White Shoal Lighthouse, Mich.....	82
Training. (See Instruction.)		Winter Quarter Shoal Lightship, Va., in hur-	
Tree Point Lighthouse, Alaska, keepers locate		ricane.....	35
plane.....	21	Wireless, early use of on San Francisco Light-	
<i>Tulip</i> , tender, refloated.....	136	ship.....	142
Twelfth district, review of progress in.....	81	Yachts. (See Small Boats.)	
Twenty-fifth anniversary of Bulletin.....	45	Yaquina Head Lightship, Oreg., visitors at.....	173
Umatilla Reef Lightship, Wash., damaged by			
storm.....	157	<i>Zinnia</i> , tender:	
United States making gains in safety on the		launched.....	157
sea.....	48	design of.....	186